# DR-135 / DR-235 / DR-435

### Service Manual

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ALINCO,INC.

#### **SPECIFICATIONS**

#### **■** General

Frequency coverage	DR-135	DR-235	DR-435
T,TG (U.S amateur)	` ,	` ,	350.000 ~ 511.995MHz (RX) 430.000 ~ 449.995MHz (TX)
E,EG (European amateur)	144.000 ~ 145.995MHz (RX.TX)		430.000 ~ 439.995MHz (RX.TX)
TA,TAG (Commercial)	118.000 ~ 135.995MHz (AM RX) 136.000 ~ 173.995MHz (RX.TX)		

Operating mode	FM	16K0F3E (Wide	mode) 8K50F3E (Nai	row mode)			
Frequency resolution		5,8.33,10,12.5,15,20,25,30,50 KHz					
Number of memory		100					
channels		09.	100				
Antenna impedance	50₁ unbalanced						
Power requirement		13.8V DC ±15% (11.7 to 15.8V)					
Ground method	Negative ground						
Current drain Receive		0.6A(Max.)	0.4A(Squelched)				
Transmit	11.0A max.	8.0A max.	/6.0	10.0A max.			
Operating temperature	- 10 °C to 60 °C						
Frequency stability			±5ppm				
Dimensions	142(w)×40(h)×174(d) mm						
		( 142×40×188m	m for projection inclu	ded)			
Weight		Ap	prox. 1.0kg				

#### **■** Transmitter

Output power	High:50W (144-148MHz)	High:25W	High:35W					
	More than 33W (136-174MHz)							
	Mid:10W	Mid:10W	Mid:10W					
	Low:Approx.5W	Low:Approx.5W	Low:Approx.5W					
Modulation system	Variable reactance frequency modulation							
Maximum frequency	151							
deviation	±5K	Hz (Wide mode) ±2.5kHz (Narrow i	node)					
Spurious emission		-60dB						
Adjacent		604B						
channel power	-60dB							
Noise and hum ratio	-40dB (Wide mode) -34dB (Narrow mode)							
Microphone impedance								

#### ■ Receiver

Sensitivity		-16dBu for 12dB SINAD										
Receiver circuitry		Double conversion superheterodyne										
Intermediate frequency	1st 21.7MHz	2nd 450kHz	1st 30.85MHz	2nd 455kHz	1st 30.85MHz	2nd 455kHz						
Squelch sensitivity		-18dBu										
Adjacent channel selectivity		-65dB(Wide mode) -55dB(Narrow mode)										
Intermoduration rejection ratio		60dB										
Spurious and image rejection ratio		70dB										
Audio output power			2.0W (8	2,10%THD)								

<sup>!</sup> Note: All specifications are subject to change without notice or obligation.

#### CIRCUIT DESCRIPTION DR-135/DR-235/DR-435

#### 1) Receiver System (DR-135)

The receiver system is a double superheterodyne system with a 21.7 MHz first IF and a 450 kHz second IF

#### 1. Front End

The received signal at any frequency in the 136.000MHz to 173.995MHz range is passed through the low-pass filter (L116, L115, L114, L113, C204, C203, C202, C216 and C215) and tuning circuit (L105, L104 and D105, D104), and amplified by the RF amplifier (Q107). The signal from Q107 is then passed through the tuning circuit (L103, L102, and varicaps D103 and D102) and converted into 21.7 MHz by the mixer (Q106). The tuning circuit, which consists of L105, L104, varicaps D105 and D104, L103, L102, varicaps D103 and D102, is controlled by the tracking voltage form the VCO. The local signal from the VCO is passed through the buffer (IC112), and supplied to the source of the mixer (Q106). The radio uses the lower side of the superheterodyne system.

#### 2. IF Circuit

The mixer mixes the received signal with the local signal to obtain the sum of and difference between them. The crystal filter (XF102, XF101) selects 21.7 MHz frequency from the results and eliminates the signals of the unwanted frequencies. The first IF amplifier (Q105) then amplifies the signal of the selected frequency.

#### 3. Demodulator Circuit

After the signal is amplified by the first IF amplifier (Q105), it is input to pin 24 of the demodulator IC (IC108). The second local signal of 21.25 MHz (shared with PLL IC reference oscillation), which is oscillated by the internal oscillation circuit in IC116 and crystal (X103), is input through pin 1 of IC108. Then, these two signals are mixed by the internal mixer in IC108 and the result is converted into the second IF signal with a frequency of 450 kHz. The second IF signal is output from pin 3 of IC108 to the ceramic filter (FL101 or FL102), where the unwanted frequency band of that signal is eliminated, and the resulting signal is sent back to the IC108 through pins 5.

The second IF signal input via pin 5 is demodulated by the internal limiter amplifier and quadrature detection circuit in IC108, and output as an audio signal through pin 12.

#### 4. Audio Circuit

The audio signal from pin 12 of IC108 is amplified by the audio amplifier (IC104:A),and switched by the signal switch IC (IC111) and then input it to the de-emphasis circuit.

and is compensated to the audio frequency characteristics in the de-emphasis circuit (R203, R207, R213, R209, C191, C218, C217) and amplified by the AF amplifier (IC104:D). The signal is then input to volume (VR1). The adjusted signal is sent to the audio power amplifier (IC117) through pin 1 to drive the speaker.

#### 5. Squelch Circuit

The detected output which is outputted from the pin 12 of IC108 is inputted to pin 19 of IC108 after it was been amplified by IC104:A and it is outputted from pin 20 after the noise component was been eliminated from the composed band pass filter in the built in amplifier of the IC, then the signal is rectified by D106 to convert into DC component. The adjusted voltage level at VR101 is delivered to the comparator of the CPU.

The voltage is led to pin 2 of CPU and compared with the setting voltage. The squelch will open if the input voltage is lower than the setting voltage.

During open squelch, pin 30 (SQC) of the CPU becomes "L" level, AF control signal is being controlled and sounds is outputted from the speaker.)

#### 6. AIR Band Reception(T only)

When the frequency is within 118~135.995MHz, Q110 automatically turns ON, pin 14 of IC108 becomes "L" level and the condition becomes in AM detection mode.

The receiver signal passed through the duplexer is let to the antenna switch (D107,D101). After passing through the band-pass filter, the signal is amplified by RF amplifier Q112. Secondly the signal is mixed with the signal from the first local oscillator in the first-mixer Q106,then converted into the first IF. Its unwanted signal is let to IC106, pin24. Then converted into the second IF. and is demodulated by AM decoder of IC106, and is output from pin13 as the AF signal.

#### 7. WIDE/NARROW switching circuit

The 2nd IF 450 kHz signal which passes through filter FL101 (wide) and FL102 (narrow) during narrow, changes its width using the width control switching IC103 and IC102.

#### 2) Transmitter System (DR-135)

#### 1. Modulator Circuit

The audio signal is converted to an electrical signal by the microphone, and input it to the microphone amplifier (Q6). Amplified signal which passes through mic-mute control IC109 is adjusted to an appropriate mic-volume by means of mic-gain adjust VR106.

IC114:A and B consists of two operational amplifiers; one amplifier (pins 1, 2, and 3) is composed of pre-emphasis and IDC circuits and the other (pins 5, 6, and 7) is composed of a splatter filter. The maximum frequency deviation is obtained by VR107, and input to the signal switch (IC113) (9600 bps packet signal input switch) and input to the cathode of the varicap of the VCO, to change the electric capacity in the oscillation circuit. This produces the frequency modulation.

#### 2. Power Amplifier Circuit

The transmitted signal is oscillated by the VCO, amplified by the drive amplifier (IC112) and younger amplifier (Q115), and input to the final power module (IC110). The signal is then amplified by the final power module (IC110) and led to the antenna switch (D110) and low-pass filter (L113, L114, L115, L116, C215, C216, C202, C203 and C204), where unwanted high harmonic waves are reduced as needed, and the resulting signal is supplied to the antenna.

#### 3. APC Circuit

Part of the transmission power from the low-pass filter is detected by D111 and D112, converted to DC. The detection voltage is passed through the APC circuit (Q118, Q117, Q116), then it controls the APC voltage supplied to the younger amplifier Q115 and the final power module IC110 to fix the transmission power.

#### 3) PLL Synthesizer Circuit (DR-135)

#### 1. PLL

The dividing ratio is obtained by sending data from the CPU (IC1) to pin 2 and sending clock pulses to pin 3 of the PLL IC (IC116). The oscillated signal from the VCO is amplified by the buffer (Q134 and Q135) and input to pin 15 of IC116. Each programmable divider in IC116 divides the frequency of the input signal by N according to the frequency data, to generate a comparison frequency of 5 or 6.25 kHz.

#### 2. Reference Frequency Circuit

The reference frequency appropriate for the channel steps is obtained by dividing the 21.25 MHz reference oscillation (X103) by 4250 or 3400, according to the data from the CPU (IC1). When the resulting frequency is 5 kHz, channel steps of 5, 10, 15, 20, 25, 30, and 50 kHz are used. When it is 6.25 kHz, the 12.5 kHz channel step is used.

#### 3. Phase Comparator Circuit

The PLL (IC116) uses the reference frequency, 5 or 6.25kHz. The phase comparator in the IC116 compares the phase of the frequency from the VCO with that of the comparison frequency, 5 or 6.25kHz, which is obtained by the internal divider in IC116.

#### 4. PLL Loop Filter Circuit

If a phase difference is found in the phase comparison between the reference frequency and VCO output frequency, the charge pump output (pin 13) of IC116 generates a pulse signal, which is converted to DC voltage by the PLL loop filter and input to the varicap of the VCO unit for oscillation frequency control.

#### 5. VCO Circuit

A Colpitts oscillation circuit driven by Q131 directly oscillates the desired frequency. The frequency control voltage determined in the CPU (IC1) and PLL circuit is input to the varicaps (D122 and D123). This change the oscillation frequency, which is amplified by the VCO buffer (Q134) and output from the VCO area.

#### 6. VCO Shift Circuit

During transmission or the AIR band Reception (118~136 MHz), the VCO shift circuit turns ON Q138, change control the capacitance of L123 and safely oscillates the VCO by means of H signal from pin 16 of IC116.)

#### 4) Receiver System (DR-235)

The receiver system is a double superheterodyne system with a 30.85 MHz first IF and a 455 kHz second IF.

#### 1. Front End

The received signal at any frequency in the 216.000MHz to 279.995MHz range is passed through the low-pass filter (L116, L115, L114, L113, C204, C203, C202, C216 and C215) and tuning circuit (L105, L104 and D105, D104), and amplified by the RF amplifier (Q107). The signal from Q107 is then passed through the tuning circuit (L103, L107, L102, and varicaps D103, D107 and D102) and converted into 30.85 MHz by the mixer (Q106). The tuning circuit, which consists of L105, L104, varicaps D105 and D104, L103, L107, L102, varicaps D103, D107 and D102, is controlled by the tracking voltage form the VCO. The local signal from the VCO is passed through the buffer (Q112), and supplied to the source of the mixer (Q106). The radio uses the lower side of the superheterodyne system.

#### 2. IF Circuit

The mixer mixes the received signal with the local signal to obtain the sum of and difference between them. The crystal filter (XF102, XF101) selects 30.85 MHz frequency from the results and eliminates the signals of the unwanted frequencies. The first IF amplifier (Q105) then amplifies the signal of the selected frequency.

#### 3. Demodulator Circuit

After the signal is amplified by the first IF amplifier (Q105), it is input to pin 24 of the demodulator IC (IC108). The second local signal of 30.395 MHz, which is oscillated by the internal oscillation circuit in IC108 and crystal (X104), is input through pin 1 of IC108. Then, these two signals are mixed by the internal mixer in IC108 and the result is converted into the second IF signal with a frequency of 455 kHz. The second IF signal is output from pin 3 of IC108 to the ceramic filter (FL101 or FL102), where the unwanted frequency band of that signal is eliminated, and the resulting signal is sent back to the IC108 through pins 5. The second IF signal input via pin 5 is demodulated by the internal limiter amplifier and quadrature detection circuit in IC108, and output as an audio signal through pin 12.

#### 4. Audio Circuit

The audio signal from pin 12 of IC108 is amplified by the audio amplifier (IC104:A), and switched by the signal switch IC (IC111) and then input it to the de-emphasis circuit.

and is compensated to the audio frequency characteristics in the de-emphasis circuit (R203, R207, R213, R209, C191, C218, C217) and amplified by the AF amplifier (IC104:D). The signal is then input to volume (VR1) . The adjusted signal is sent to the audio power amplifier (IC117) through pin 1 to drive the speaker.

#### 5. Squelch Circuit

The detected output which is outputted from the pin 12 of IC108 is inputted to pin 19 of IC108 after it was been amplified by IC104:A and it is outputted from pin 20 after the noise component was been eliminated from the composed band pass filter in the built in amplifier of the IC, then the signal is rectified by D106 to convert into DC component. The adjusted voltage level at VR101 is delivered to the comparator of the CPU.

The voltage is led to pin 2 of CPU and compared with the setting voltage. The squelch will open if the input voltage is lower than the setting voltage.

During open squelch, pin 30 (SQC) of the CPU becomes "L" level, AF control signal is being controlled and sounds is outputted from the speaker.)

#### 6. AIR Band Reception(T only)

If it is made air band receiving mode, IF signal is demodulated by AM decoder of IC106, and is output from pin13 as the AF signal.

#### 7. WIDE/NARROW switching circuit

The 2nd IF 455 kHz signal which passes through filter FL101 (wide) and FL102 (narrow) during narrow, changes its width using the width control switching IC103 and IC102.

#### 5) Transmitter System (DR-235)

#### 1. Modulator Circuit

The audio signal is converted to an electrical signal by the microphone, and input it to the microphone amplifier (Q6). Amplified signal which passes through mic-mute control IC109 is adjusted to an appropriate mic-volume by means of mic-gain adjust VR106.

IC114:A and B consists of two operational amplifiers; one amplifier (pins 1, 2, and 3) is composed of pre-emphasis and IDC circuits and the other (pins 5, 6, and 7) is composed of a splatter filter. The maximum frequency deviation is obtained by VR107, and input to the signal switch (IC113) (9600 bps packet signal input switch) and input to the cathode of the varicap of the VCO, to change the electric capacity in the oscillation circuit. This produces the frequency modulation.

#### 2. Power Amplifier Circuit

The transmitted signal is oscillated by the VCO, amplified by the drive amplifier (IC112) and younger amplifier (Q115), and input to the final power module (IC110). The signal is then amplified by the final power module (IC110) and led to the antenna switch (D110) and low-pass filter (L113, L114, L115, L116, C215, C216, C202, C203 and C204), where unwanted high harmonic waves are reduced as needed, and the resulting signal is supplied to the antenna.

#### 3. APC Circuit

Part of the transmission power from the low-pass filter is detected by D111 and D112, converted to DC. The detection voltage is passed through the APC circuit (Q118, Q117, Q116), then it controls the APC voltage supplied to the younger amplifier Q115 and the final power module IC110 to fix the transmission power.

#### 6) PLL Synthesizer Circuit (DR-235)

#### 1. PLL

The dividing ratio is obtained by sending data from the CPU (IC1) to pin 2 and sending clock pulses to pin 3 of the PLL IC (IC501). The oscillated signal from the VCO is amplified by the buffer (Q504 and Q501) and input to pin 15 of IC501. Each programmable divider in IC501 divides the frequency of the input signal by N according to the frequency data, to generate a comparison frequency of 5 or 6.25 kHz.

#### 2. Reference Frequency Circuit

The reference frequency appropriate for the channel steps is obtained by dividing the 12.8 MHz reference oscillation (X103) by 2560 or 2048, according to the data from the CPU (IC1). When the resulting frequency is 5 kHz, channel steps of 5, 10, 15, 20, 25, 30, and 50 kHz are used. When it is 6.25 kHz, the 12.5 kHz channel step is used.

#### 3. Phase Comparator Circuit

The PLL (IC501) uses the reference frequency, 5 or 6.25kHz. The phase comparator in the IC501 compares the phase of the frequency from the VCO with that of the comparison frequency, 5 or 6.25kHz, which is obtained by the internal divider in IC501.

#### 4. PLL Loop Filter Circuit

If a phase difference is found in the phase comparison between the reference frequency and VCO output frequency, the charge pump output (pin 13) of IC501 generates a pulse signal, which is converted to DC voltage by the PLL loop filter and input to the varicap of the VCO unit for oscillation frequency control.

#### 5. VCO Circuit

A Colpitts oscillation circuit driven by Q503 directly oscillates the desired frequency. The frequency control voltage determined in the CPU (IC1) and PLL circuit is input to the varicaps (D503 and D504). This change the oscillation frequency, which is amplified by the VCO buffer (Q504) and output from the VCO area.

#### 7) Receiver System (DR-435)

The receiver system is a double superheterodyne system with a 30.85 MHz first IF and a 455 kHz second IF.

#### 1. Front End

The received signal at any frequency in the 430.00MHz to 439.995MHz range is passed through the low-pass filter (L115, L114, L116, C204, C203, C202, C216 and C215) and amplified by the RF amplifier (Q107). The signal from Q107 is then passed through the BPF circuit (L103, L102) and converted into 30.85 MHz by the mixer (Q106). The local signal from the VCO is passed through the buffer (Q503,Q504), and supplied to the source of the mixer (Q106). The radio uses the lower side of the superheterodyne system.

#### 2. IF Circuit

The mixer mixes the received signal with the local signal to obtain the sum of and difference between them. The crystal filter (XF101) selects 30.85MHz frequency from the results and eliminates the signals of the unwanted frequencies. The first IF amplifier (Q105) then amplifies the signal of the selected frequency.

#### 3. Demodulator Circuit

After the signal is amplified by the first IF amplifier (Q105), it is input to pin 20 of the demodulator IC (IC108). The second local signal of 30.85MHz (Crystal oscillator) is input pin 1 of IC108. Then, these two signals are mixed by the internal mixer in IC108 and the result is converted into the second IF signal with a frequency of 455 kHz. The second IF signal is output from pin 4 of IC108 to the ceramic filter (FL101 or FL102), where the unwanted frequency band of that signal is eliminated, and the resulting signal is sent back to the IC108 through pins 6.

The second IF signal input via pin 6 is demodulated by the internal limiter amplifier and quadrature detection circuit in IC108, and output as an audio signal through pin 11.

#### 4. Audio Circuit

The audio signal from pin 11 of IC108 is amplified by the audio amplifier (IC104:A), and switched by the signal switch IC (IC111) and then input it to the de-emphasis circuit.

and is compensated to the audio frequency characteristics in the de-emphasis circuit (R203, R207, R213, R209, C191, C218, C217) and amplified by the AF amplifier (IC104:D). The signal is then input to volume (VR1) . The adjusted signal is sent to the audio power amplifier (IC117) through pin 1 to drive the speaker.

#### 5. Squelch Circuit

The detected output which is outputted from the pin 11 of IC108 is inputted to pin 13 of IC108 after it was been amplified by IC104:A and it is outputted from pin 14 after the noise component was been eliminated from the composed band pass filter in the built in amplifier of the IC, then the signal is rectified by D106 to convert into DC component. The adjusted voltage level at VR101 is delivered to the comparator of the CPU.

The voltage is led to pin 2 of CPU and compared with the setting voltage. The squelch will open if the input voltage is lower than the setting voltage.

During open squelch, pin 30 (SQC) of the CPU becomes "L" level, AF control signal is being controlled and sounds is outputted from the speaker.

#### 6. WIDE/NARROW switching circuit

The 2nd IF 455 KHz signal which passes through filter FL101 (wide) and FL102 (narrow) during narrow, changes its width using the width control switching IC103 and IC102.

#### 8) Transmitter System (DR-435)

#### 1. Modulator Circuit

The audio signal is converted to an electrical signal by the microphone, and input it to the microphone amplifier (Q6). Amplified signal which passes through mic. mute control IC109 is adjusted to an appropriate mic. volume by means of mic. gain adjust VR106.

IC114:A and B consists of two operational amplifiers; one amplifier (pins 1, 2, and 3) is composed of pre-emphasis and IDC circuits and the other (pins 5, 6, and 7) is composed of a splatter filter. The maximum frequency deviation is obtained by VR107. and input to the signal switch (IC113) (9600 bps packet signal input switch) and input to the cathode of the varicap of the VCO, to change the electric capacity in the oscillation circuit. This produces the frequency modulation.

#### 2. Power Amplifier Circuit

The transmitted signal is oscillated by the VCO, amplified by the drive amplifier (Q131, Q125) and younger amplifier (Q115), and input to the final power module (IC110). The signal is then amplified by the final power module (IC110) and led to the antenna switch (D110) and low-pass filter (L116, L114, L115, C215, C216, C202, C203 and C204), where unwanted high harmonic waves are reduced as needed, and the resulting signal is supplied to the antenna.

#### 3. APC Circuit

Part of the transmission power from the low-pass filter is detected by D111 and D112, converted to DC. The detection voltage is passed through the APC circuit(Q118, Q117, Q116), then it controls the APC voltage supplied to the younger amplifier Q115 and the final power module IC110 to fix the transmission power.

#### 9) PLL Synthesizer Circuit (DR-435)

#### 1. PLL

The dividing ratio is obtained by sending data from the CPU (IC1) to pin 2 and sending clock pulses to pin 3 of the PLL IC (IC501). The oscillated signal from the VCO is amplified by the buffer (Q503 and Q501) and input to pin 15 of IC501. Each programmable divider in IC501 divides the frequency of the input signal by N according to the frequency data, to generate a comparison frequency of 5 or 6.25 kHz.

#### 2. Reference Frequency Circuit

The reference frequency appropriate for the channel steps is obtained by dividing the 21.25 MHz reference oscillation (X103) by 4250 or 3400, according to the data from the CPU (IC1). When the resulting frequency is 5 kHz, channel steps of 5, 8.33, 10, 15, 20, 25, 30, and 50 kHz are used. When it is 6.25 kHz, the 12.5 kHz channel step is used.

#### 3. Phase Comparator Circuit

The PLL (IC501) uses the reference frequency, 5 or 6.25kHz. The phase comparator in the IC501 compares the phase of the frequency from the VCO with that of the comparison frequency, 5 or 6.25kHz, which is obtained by the internal divider in IC501.

#### 4. PLL Loop Filter Circuit

If a phase difference is found in the phase comparison between the reference frequency and VCO output frequency, the charge pump output (pin 13) of IC501 generates a pulse signal, which is converted to DC voltage by the PLL loop filter and input to the varicap of the VCO unit for oscillation frequency control.

#### 5. VCO Circuit

A Colpitts oscillation circuit driven by Q502 directly oscillates the desired frequency. The frequency control voltage determined in the CPU (IC1) and PLL circuit is input to the varicaps (D502 and D503). This change the oscillation frequency, which is amplified by the VCO buffer (Q503,504) and output from the VCO unit.

#### 10) CPU and Peripheral Circuits (DR-135 DR-235 DR-435)

#### 1. LCD Display Circuit

The CPU turns ON the LCD via segment and common terminals with 1/4 the duty and 1/3 the bias, at the frame frequency is 64Hz.

#### 2. Dimmer Circuit

The dimmer circuit makes the output of pin 13 of CPU (IC1) into "H" level at set mode, so that Q9 and Q3 will turn ON to make the lamp control resistor R84 short and make its illumination bright. But on the other hand, if the dimmer circuit makes pin 13 into "L" level, Q9 and Q3 will turn OFF, R84's illumination will become dimmer as its hang on voltage falls down in the working LED (D11, D2, D5, D3 and D6).

#### 3. Reset and Backup

When the power form the DC cable increases from Circuits 0 V to 2.5 or more, "H" level reset signal is output form the reset IC (IC4) to pin 33 of the CPU (IC1), causing the CPU to reset. The reset signal, however, waits at 100, and does not enter the CPU until the CPU clock (X1) has stabilized.

#### 4. S(Signal) Meter Circuit

The DC potential of pin 16 of IC106 is input to pin 1 of the CPU (IC1), converted from an analog to a digital signal, and displayed as the S-meter signal on the LCD.

#### 5. DTMF Encoder

The CPU (IC1) is equipped with an internal DTMF encoder. The DTMF signal is output from pin 10, through R35, R34 and R261 (for level adjustment), and then through the microphone amplifier (IC114:A), and is sent to the varicap of the VCO for modulation. At the same time, the monitoring tone passes through the AF circuit and is output form the speaker.

#### 6. Tone Encoder

The CPU (IC1) is equipped with an internal tone encoder. The tone signal (67.0 to 250.3 Hz) is output from pin 9 of the CPU to the varicap (D122 and D123) of the VCO for modulation.

#### 7. DCS Encoder

The CPU (IC1) is equipped with an internal DCS code encoder. The code (023 to 754) is output from pin 9 of the CPU to the varicap (D124) of the PLL reference oscillator. When DCS is ON, DCS MUTE circuit (Q126-ON, Q133-ON, Q132-OFF) works. The modulation activates in X103 side only.

#### 8. CTCSS, DCS Decoder

The voice band of the AF output signal from pin 1 of IC104:A is cut by sharp active filter IC104:B and C (VCVS) and amplified, then led to pin 4 of CPU. The input signal is compared with the programmed tone frequency code in the CPU. The squelch will open when they match. During DCS, Q108 is ON, C156 is working and cut off frequency is lowered.

#### 11) Power Supply Circuit

When power supply is ON, there is a "L" signal being inputted to pin 39 (PSW) of CPU which enables the CPU to work.

Then, "H" signal is outputted from the pin 41 (C5C) of CPU and drives ON the power supply switch control Q8 and Q7 which turns the 5VS ON.

5VS turns ON the PLL IC116, main power supply switch Q127 and Q122, AF POWER IC117 and the 8 V of AVR (IC115).

During reception, pin 29 (R5) of CPU outputs "H" level, Q124 is ON, and the reception circuits supplied by 8 V. While during transmission, pin 28 (T5) of CPU outputs "L" level which is reverse by Q11 so that the output in Q128 will be "H" level, Q123 is ON, and the transmission circuit is supplied by 8 V.

Or, in the case when the condition of PLL is UNLOCK, "H" level is outputted from pin 14 of IC106, UNLOCK switch Q129is ON, transmission switch Q128 is OFF which makes the transmission to stop.

#### 1. ACC External Power Supply Terminal

When optional power supply cord DEC-37 etc. is connected to the external power supply terminal JK101, with ACC power supply ON, switch Q101 will turn ON, 5 V of AVR IC101 pin 2 (STB) becomes "L" which makes C5V to turn ON. With this, it can turn the power supply of the radio ON.

P63/SCLK22/AN3 P62/SCLK21/AN2 P61/SOUT2/AN1 P60/SIN2/AN0 P57/ADT/DA2 P55/CNTR1 P54/CNTR0 P53/RTP1 P52/RTP0 P51/PWM1 P50/PWM0 P47/SRDY1 P46/SCLK1 P43/Ø/TOUT

P67/AN7 P66/AN6 P65/AN5 P64/AN4

P56/DA1

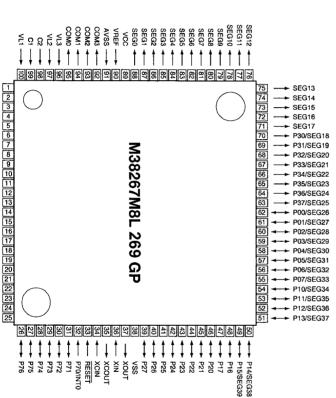
P45/TXD P44/RXD

P42/INT2 P41/INT1 P40 P77

# 12) M3826M8L269GP (XA0818)

CPU

Terminal Connection (TOP VIEW)



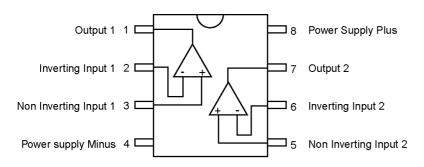
No.	Pin Name	Function	I/O	PU	Logic	Description
1	P67/AN7	SMT	ı	-	A/D	S-meter input
2	P66/AN6	SQL	I	ı	A/D	Noise level input for squelch
3	P65/AN5	BAT	I	ı	A/D	Battery voltage input
4	P64/AN4	TIN	I	-	A/D	CTCSS tone input/DSC code input
	P63/SCLK22/AN3		I	-	A/D	Band plan 1
	P62/SCLK21/AN2		ı	-	A/D	Band plan 2
7	P61/SOUT2/AN1	DCSW	0	-	Activ high	DCS signal mute
8	P60/SIN2/AN0	RE2	ı	-	Activ low	Rotary encoder input
9	P57/ADT/DA2	TOUT	0	-	D/A	CTCSS tone output/DCS tone output
10	P56/DA1	DOUT	0	-	D/A	DTMF output
11	P55/CNTR1	SCL	0	-	Pulse	Serial clock for EEPROM
12	P54/CNTR0	TBST	0	-	Pulse	Tone burst output
13	P53/RTP1	BP4	I	-	-	Band plan 4
14	P52/RTP0	MUTE	I/O	-	Activ low	Microphone mute/Security alarm SW
15	P51/PWM3	CLK	0	-	Pulse	Serial clock output for PLL,scramble
16	P50/PWM	DATA	I/O	-	Pulse	Serial data output for PLL scramble/PLL unlock signal input
17	P47/SROY1	TSTB	I/O	-	Activ low/Pulse	o o
18	P46/SCLK1	STB	0	-	Pulse	Strobe for PLL IC
19	P45/TXD	UTX	0	-	Pulse	UART data transmission output
20	P44/RXD	RTX	ı	-	Pulse	UART data reception output
21	P43/Φ/TOUT	BEEP	I/O	-		Beep tone/Band plan 3
22	P42I/NT2	SEC	ı	-	Activ high	Security voltage input
23	P41/INT1	RE1	ı	-	Activ low	Rotary encoder input
24	P40	DSQ	ı	-	Activ high	Digital squelch input
25	P77	PTT	- 1	-	Activ low	PTT input
26	P7	SSTB	0	-	Pulse/Activ low	Strobe signal to scramble IC/Security mode
27	P75	W/N	0	-	Activ low	Wide Narrow SW
28	P74	T5	0	-	Activ low	TX power ON/OFF output
29	P73	R5	0	-	Activ high	RX power ON/OFF output
30	P72	SQC	0	-	Activ low	SQL ON/OFF
31	P71	C/S	0	-	Activ low	Digital scramble ON/OFF
32	P70/INTO	BU	l i	-	Activ low	Backup signal detection input
33	RESET	RESET	I	-	Activ low	Reset input
34	Xcin	Xcin	-	-	-	-
35	Xcout	Xcout	-	-	-	-
36	Xin	Xin	-	-	-	Main clock input
37	Xout	Xout	-	-	-	Main clock output
38	Vss	GND	-	-	As disclosed	CPU GND
40	P27 P26	PSW	0	-	Avtiv low	Power switch input Serial data for EEPROM
41	P25	SDA C5C	0	-	Pulse	
42	P24	AIR	0	-	Activ high	C5V power ON/OFF output Air band SW / Tx middle power
42	P24 P23	LOW	0		Activ high Activ high	Tx low power
44	P23	EXP	0	-	Activ high	Trunking data SW
45	P21	SW6	-	*	Activ Ingri Activ Iow	Key sw6 (SQL)
46	P21 P20	SW5	l I	*	Activ low	Key sw5 (CALL)
47	P17	SW4	I	*	Activ low	Key sw4 (TSQ)
48	P16	SW3	1	*	Activ low	Key sw3 (MHz)
49	P15/SEG39	SW2		*	Activ low	Key sw2 (V/M)
50	P14/SEG38	SW1	l I	*	Activ low	Key sw1 (FUNC)
51	P13/SEG37	DOWN	I	*	Activ low	Mic down input
52	P12/SEG36	DUD	ı	_ T	7 (GUV 10VV	Digital unit detect
53	P11/SEG35	SCR	ı	*	Active low	Scramble IC ready signal/Packet PTT
54	P10/SEG34	UP	j	*	Active low	Mic down input
55	P07/SEG33	S33	0		- , (3(1)(3)(10)()	LCD segment signal
	107/02/00	555				LOD Joginoni Jighal

No.	Pin Name	Function	I/O	PU	Logic	Description
56	P06/SEG32	S32	0	-	-	
57	P05/SEG31	S31	0	-	-	1
58	P04/SEG30	S30	0	-	-	1
59	P03/SEG29	S29	0	-	-	1
60	P02/SEG28	S28	0	-	-	1
61	P01/SEG27	S27	0	-	-	1
62	P00/SEG26	S26	0	-	-	1
63	P37/SEG25	S25	0	-	-	1
64	P36/SEG24	S24	0	-	-	- -
65	P35/SEG23	S23	0	-	-	
66	P34/SEG22	S22	0	-	-	1
67	P33/SEG21	S21	0	-	-	
68	P32/SEG20	S20	0	-	-	1
69	P31/SEG19	S19	0	-	-	1
70	P30/SEG18	S18	0	-	-	
71	SEG17	S17	0	-	-	
72	SEG16	S16	0	-	-	1.05
73	SEG15	S15	0	-	-	LCD segment signal
74	SEG14	S14	0	-	-	1
75	SEG13	S13	0	-	-	
76	SEG12	S12	0	-	-	
77	SEG11	S11	0	-	-	
78	SEG10	S10	0	-	-	1
79	SEG9	S9	0	-	-	1
80	SEG8	S8	0	-	-	1
81	SEG7	S7	0	-	-	1
82	SEG6	S6	0	-	-	_
83	SEG5	S5	0	-	-	_
84	SEG4	S4	0	-	-	1
85	SEG3	S3	0	-	-	1
86	SEG2	S2	0	-	-	1
87	SEG1	S1	0	-	-	1
88	SEG0	S0	0	-	-	
89	Vcc	VDD	-	-	-	CPU power terminal
90	Vref	Vref	-	-	-	AD converter power supply
91	Avss	Avss	-	-	-	AD converter GND
92	COM3	COM3	0	-	-	LCD COM3 output
93	COM2	COM2	0	-	-	LCD COM2 output
94	COM1	COM1	0	_	_	LCD COM1 output
95	COM0	COM0	0	_	_	LCD COM0 output
96	VL3	VL3	_	-	-	LCD nower aunnhy
97	VL2	VL2	-	-	-	LCD power supply
98	C2	I	-	-	-	-
99	C1	C1	-	-	-	-
100	VL1	VL1	ı	-	A/D	LCD power supply

#### **SEMICONDUCTOR DATA**

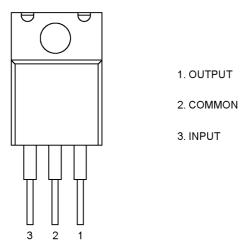
#### 1) M5218FP (XA0068)

Dual Low Noise Operational Amplifiers



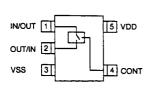
#### 2) NJM7808FA (XA0102)

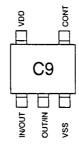
#### Pin Assignment



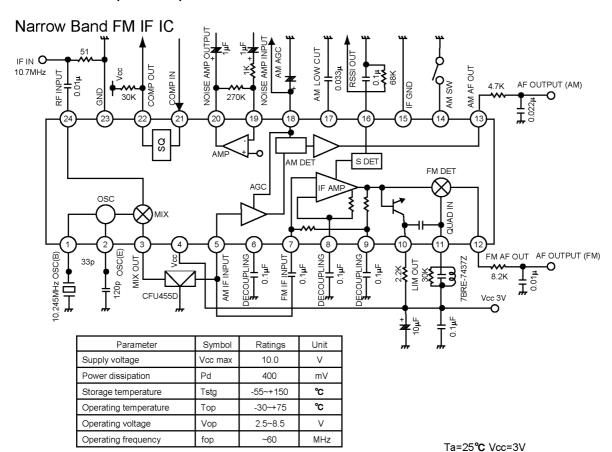
#### 3) TC4S66F (XA0115)

#### **Bilateral Switch**





#### 4) TK10930VTL (XA0223)

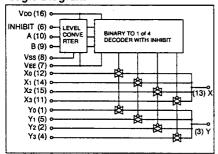


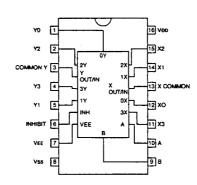
Parameter	Symbol	Ratings			Unit	Condition
Farameter	Syllibol	Min	Typical	Max	Offic	Condition
Supply Current 1	lcc1		6.8	8.9	mA	No signal, AM ON
Supply Current 2	lcc2		3.9	5.3	mΑ	No signal, AM OFF
Mixer Coversion Gain	Mg		20		dB	
Mixer Input Impedance	Mz		3.6		ΚΩ	DC Test
FM						
Limiting Sensitivity	Limit		2.0	8.0	μ∨	-3.0dB
Output Voltage	Vo1	85	150	230	mVrms	10mVin +/-3kHz DEV
Distortion	THD1		1.0	2.0	%	10mVin +/-3kHz DEV
Output Impedance	Zo		800		Ω	10mVin
Filter Gain	Gf	30	38		dB	Fin=30kHz, Vo=100mV
Scan Control Hi Voltage	SH	2.3			V	Squelch input=2.5V
Scan Control Low Voltage	SL			0.3	V	Squelch input=0V
Squelch Hysteresis	Hys		30		mV	
S meter Output Voltage	S0		0.05	0.5	V	Vin=0mV, RS=68k <b>Ω</b>
S meter Output Voltage	S1	0.05	0.5	0.9	٧	Vin=0.01mV, RS=68kΩ
S meter Output Voltage	S2	0.7	1.2	1.7	٧	Vin=0.1mV, RS=68kΩ
S meter Output Voltage	S3	1.2	1.8	2.5	V	Vin=1mV, RS=68k <b>Ω</b>
S meter Output Voltage	S4	1.6	2.3	2.9	V	Vin=10mV, RS=68kΩ
S meter Output Voltage	S5	1.8	2.4	2.9	V	Vin=100mV, RS=68kΩ
АМ						
Sensitivity	us	20	15		μ∨	required input level to get 20mV rms output
Output Voltage	Vo2	60	120	160	mVrms	1kHz, 30%, Vin=1mV
Distortion-1	THD2		1.0	2.0	%	1kHz, 30%, Vin=1mV
Distortion-2	THD3		2.0	4.0	%	1kHz, 30%, Vin=1mV
S/N	S/N	40	48		dB	1kHz, 30%, Vin=1mV
AM OFF	Vo	-0.3		0.3	%	

#### 5) BU4052BF (XA0236)

#### Analog Multiplexer/Demultiplexer

Logic Diagram





**Truth Table** 

INHIBIT	A	В	ON SWITCH
L	Ļ	L	X0 Y0
L	Н	L	X1 Y1
L	L	Н	X2 Y2
L	Н	Н	X3 Y3
н	х	х	NONE

X: Don't Care

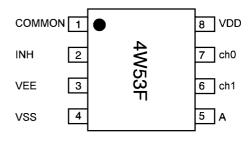
#### 6) TC4W53FU (XA0348)

#### Multiplexer/Demultiplexer

**Function Table** 

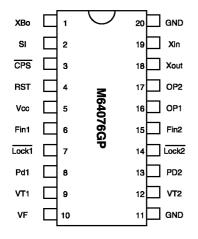
Contro	ol input	ON channel	
INH	Α	ON Chamile	
L	L	ch0	
L	Η	ch1	
Н	*	NONE	

<sup>\*</sup> Don't Care

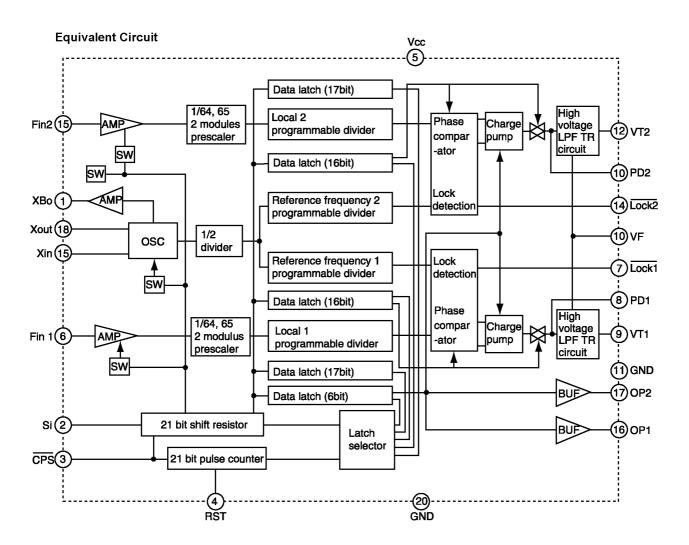


#### 7) M64076GP (XA0352)

**Dual PLL Synthesizer** 

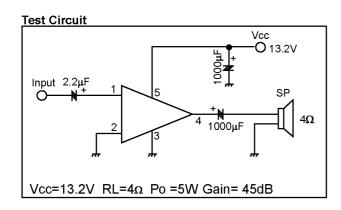


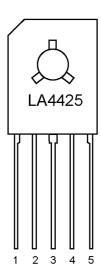
Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Power supply voltage	Vcc	Fin=80~520MHz Vin=-10dBm	2.7	1	5.5	٧
LPF supply voltage	VF		-	9	12	V
Local oscillator input level	Vin	Fin=80~520MHz	-20	-	-4	dBm
Local oscillator input frequency	Fin	Vin=-20~-4dBm Vcc=2.7~5.5V	80	-	520	MHz
Xin input level	Vxin	Vcc=2.7~5.5V Fxin=10~25MHz Sine wave	0.4	-	1.4	Vp-p
Xin input frequency	Fxin	Vcc=2.7~5.5V Vxin=0.4~1.4Vp-p	10	-	25	MHz



#### 8) LA4425A (XA0410)

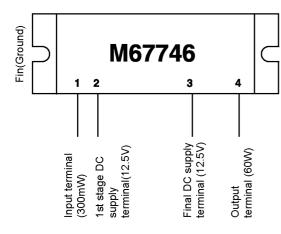
5W Audio Power Amplifiers





#### 9) M67746 (XA0412)

144 ~ 148MHz 60W RF Power Module



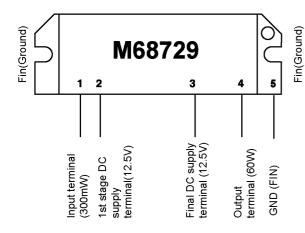
Rating	Symbol	Ratings	Unit
Supply voltage	Vcc	17	>
Total current	Icc	20	Α
Input power	Pin(max)	600	mW
Output Power	Po(max)	70	W
Operation case temperature	Tc(op)	-30 to + 110	ပ္
Strage temperature	Tstg	-40 to + 110	တ

Zg=Zl=50Ω

Fin(Ground)

#### 10) M68729 (XA0591)

#### 220 ~ 246MHz 30W RF Power Module



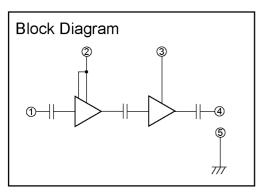
#### ABSOLUTE MAXIMUM RATING(TC = $25^{\circ}$ C)

Rating	Symbol	Ratings	Unit
Supply voltage	Vcc	17	V
Total current	Icc	10	Α
Input power	Pin(max)	600	mW
Output Power	Po(max)	40	W
Operation case temperature	Tc(op)	-30 to + 110	°C
Strage temperature	Tstg	-40 to + 110	°C

 $Zg=ZI=50\Omega$ 

#### **ELECTRICAL CHARACTERISTICS**

	Dawawatan	Test conditions	Lim	Unit	
Symbol	Parameter	rest conditions	Min	Max	Oriit
f	Frequency range		220	246	MHz
Po	Output power		30		W
ητ	Total efficiency	Vcc <sub>1,2</sub> = 12.5V Pin = 300mV	40		%
2fo	2nd. harmonic	$Z_G = Z_L = 50\Omega$		-30	dBc
3fo	3rd. harmonic			-30	dBc
ρin	Input VSWR			3	-
-	Load VSWR tolerance	VCC1,2 = 15.2V Po = 30W(Pin = Controlled) Load VSWR = 20:1 (All phase), Ze = $50\Omega$		radation roy	-

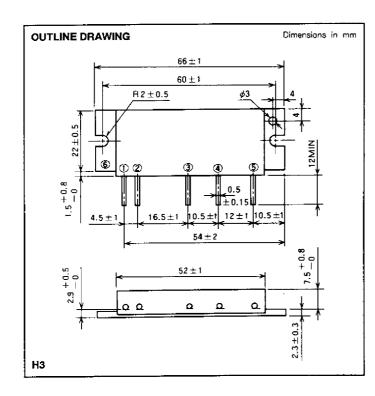


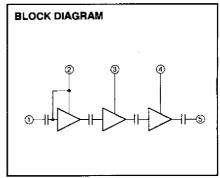
PIN:

(1) Pin : RF INPUT
(2) Vcc1 : 1st. DC SUPPLY
(3) Vcc2 : 2nd. DC SUPPLY
(4) PO : RF OUTPUT

⑤ GND:FIN

#### 11) M57788M (XA0077)





PIN:

①Pin: RF INPUT
②VCC1: 1st. DC SUPPLY
③VCC2: 2nd. DC SUPPLY
④VCC3: 3rd. DC SUPPLY
⑤PO: RF CUTPUT
⑥GND: FIN

**ABSOLUTE MAXIMUM RATINGS** (Tc = 25% unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Voci			16	V
Vcc2.3	Supply voltage		17	V
cc	Total current		12	Α
Pin(max)	Input power	$Z_G = Z_L = 50 \Omega$	0.5	W
Po(max)	Output power	Zg = ZL = 50 Ω	50	W
Tc(op)	Operation case temperature		- 30~110	℃
Tsta	Storage temperature		- 40~110	ಌ

#### **ELECTRICAL CHARACTERISTICS** (To = $25\,^{\circ}\text{C}$ unless otherwise noted)

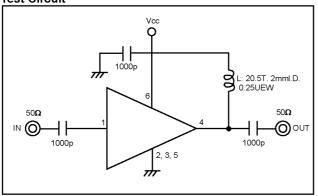
	3	Task and delance	Lir	Unit		
Symbol	Parameter	Test conditions	Min	Max	ı	
f	Frequency range		430	450	MHz	
Po	Output power	Pin = 0.4W	40		W	
ηт	Total efficiency	Vcc = 12.5V	40		%	
2fo	2nd. harmonic	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω		- 30	d₿	
ρin	Input VSWR		2.8			
	Load VSWR tolerance	$V_{CC} = 15.2V$ , $P_{O} = 40W$ ( $P_{In}$ : controlled) Load VSWR=8, 8:1 (A11 phase), 2sec. $Z_{G} = 50 \Omega$	No degrad	dation	-	

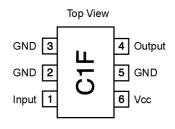
#### 12) µPC2710T (XA0449)

#### **RF** Amplifier

Parameter	Symbol	Condition	Ratings	Unit
Supply voltage	Vcc		5.0	٧
Circuit current	Icc	Vcc=5V, no signa	22	mA
Power gain	GP	Vcc=5V, f=500MHz	33	dB
Staturated output power	Po(sat)	Vcc=5V, f=500MHz, Pin=-8dBm	+13.5	dBm
Noise figure	NF	Vcc=5V, f=500MHz	3.5	dB
Upper frequency (-3dB)	fu	Vcc=5V, Reference freq. =100MHz	1000	MHz
Isolation	ISL	Vcc=5V, f=500MHz	39	dB
Input return loss	RL in	Vcc=5V, f=500MHz	6	dB
Output return loss	RL out	Vcc=5V, f=500MHz	12	dB
Gain flatness	Gp	Vcc=5V, f=0.1~0.6GHz	0.8	dB

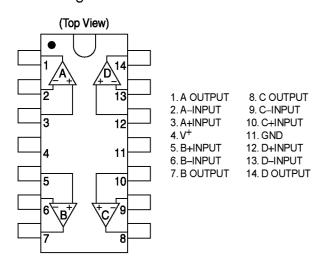
#### **Test Circuit**





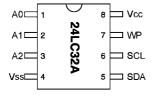
#### 13) NJM2902 (XA0596)

#### Pin Assignment



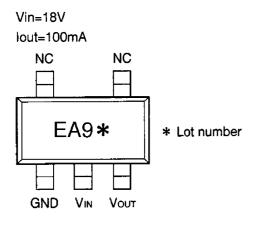
#### 14) 24LC32A (XA0604)

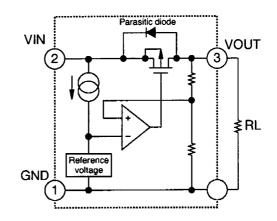
#### **PDIP**



Name	Function
A0A2	User Configurable Chip Selects
Vss	Ground
SDA	Serial Address/Data I/O
SCL	Serial Clock
WP	Write Protect Input
Vcc	+2.5V~6.0V Power Supply

#### 15) S-80845ALMP-EA9-T2 (XA0620)

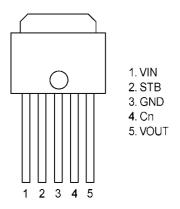


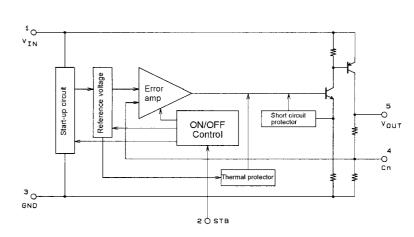


#### 16) L88MS05TLL (XA0675)

#### 5V Voltage Regulator With On/Off Function

#### Pin Assignment

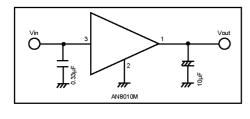


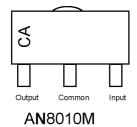


#### 17) AN8010M (XA0119)

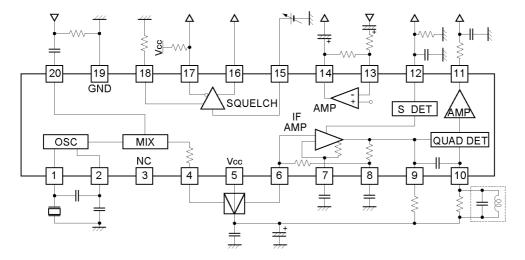
#### Voltage Regulator

#### **Test Circuit**





#### 18) TK10489M (XA0314)

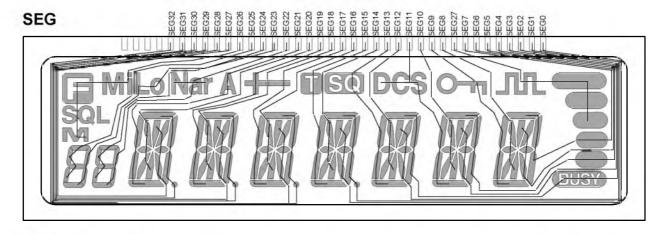


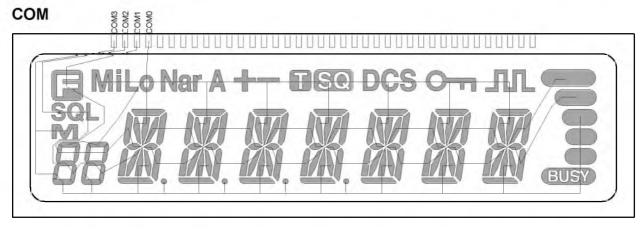
#### 19) Transistor, Diode, and LED Outline Drawings

#### Top View

10p VIEW						
RLS-73	1SS355	1SS356	1SV214	1SV237	1SV262	1SV268
XD0363	XD0254	XD0272	XD0131	XD0141	XD0300	XD0301
	□ <b>△</b> △			₩ BB Å		<b>F</b>
DA204U	DAN235U	DSA3A1	MA304	MA729	MA8100	MA742
XD0130	XD0246	XD0131	XD0299	XD0300	XD0297	XD0250
K	文 本 M		□ 8R □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	E 28 II	五 日 -8^2 日	李 本 字 M1U
MI407	2SK508	2SK880GR	3SK131V12	2SA1036K	2SA1576	2SA1736
XD0013	XE0010	XE0021	XE0028	XT0110	XT0094	XT0099
<b>△</b> Mi7	С К52 П S	G G X B D	G1 G2 H H V12 D S	HQ HQ B E	C FR B E	LD B C E
2SB1132 XT0061	2SB1292F XT0112	2SC2954 XT0084	2SC3356 XT <b>0</b> 03 <b>0</b>	2SC3357 XT0048	2SC4081 XT0095	2SC4099 XT0096
C (DA D C	O B1292 UUU BCE	р С С С С С С С С С С С С С С С С С С С	C R24 B E	BURE IIO	C BR B E	CI 9 DE
2SC4215	2SC4226	2SC4245	3SK184S	DTA114YU	DTC114EU	DTC144EUA
XT0124	XT01.41	XT0125	XE0013	XU0112	XU0131	XU0148
C QY D D D D D D D D D D D D D D D D D D	C R24 B E		G1 G2 H H 3RS H H D S	54 B E	24 B E	С Д 26 В Е
DTC144YU XU0029	FA1111C XL0069	FA1111C XL0077	UDZ5. 1B XD 0165	UMC3TR XU0047	UMC5N XU0152	U1BC44 XD0135
64 B E XP1215	* 🗀	¥	A2 III	E2 B1 E1	E2 B1 E1	
XU0178  XU0178  B2 E B1  B B B B B B B B B B B B B B B B B B						

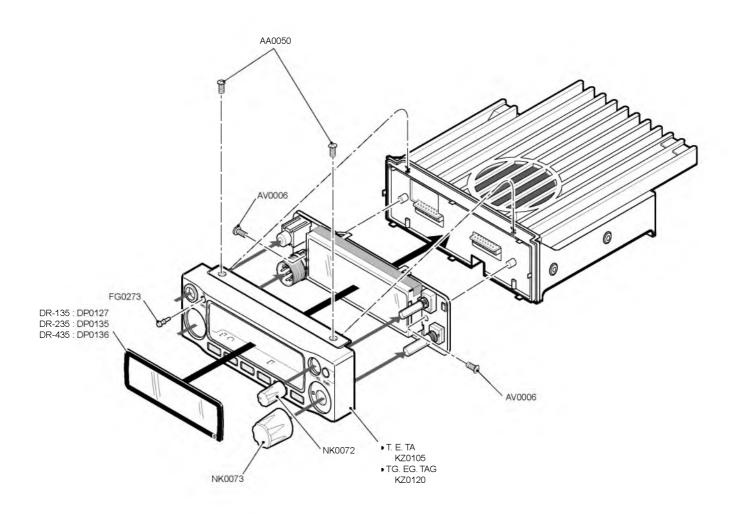
#### 20) LCD Connection (TTR3626UPFDHN)



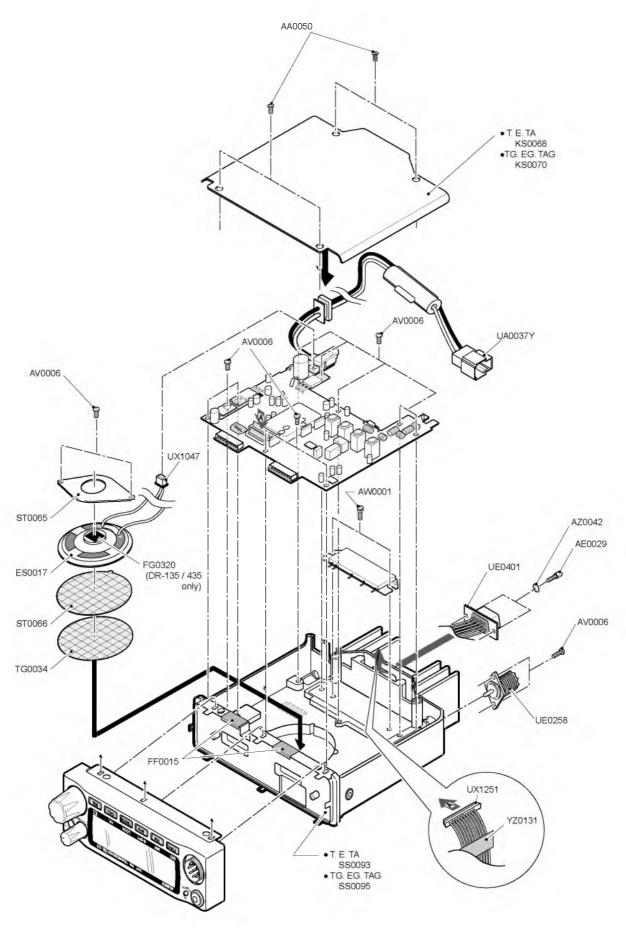


#### **EXPLODED VIEW**

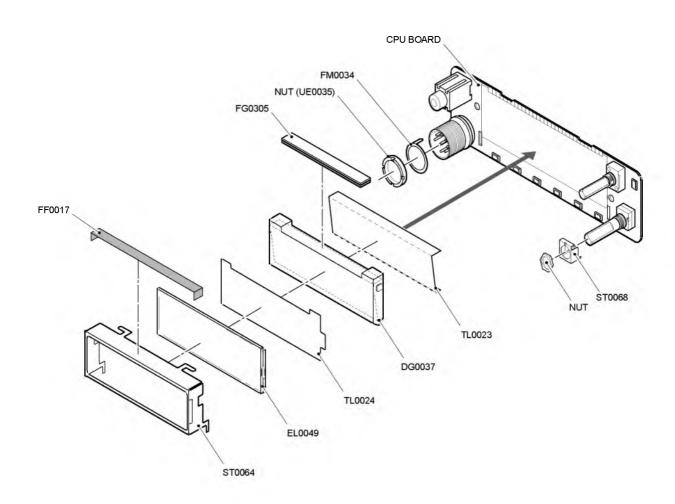
#### 1) Top and Front View



#### 2) Bottom View



#### 3) LCD Assembly



# PARTS LIST

## CPU

2	_			0		1	<u></u>	_				Q V		┙
No.	Parts No.	Description	Parts Name	DR-135 DR-235	35 DR-435	ا er	z ;	No.	Parts No.	Description	Parts Name	DR-135 DR-23	5 DR-435 Ver	
3 3	CU3111	Chip C.	C1608JB1C104KT-N			<u> </u>	<u> </u>			Chip R.	MCR03EZHJ472 MCR03EZHJ000	<u></u>	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
2 2			C1608JB1E153KT-NS	<u></u>	<u> </u>	<u> </u>	2 2		RK3048	Chip R.	MCR03EZHJ682			
G Ç			C1608JB1C104KT-N				2 2			Chip R.	MCR03EZHJ000		1 1T,TG	
C7 C8		Chip C. Chip C.	C1608CH1H101JT-AS C1608CH1H101JT-AS	<u> </u>			R19			Chip R.	MCR03EZHJ104 MCR03EZHJ472			
G G	CU3043	Chip C.	C1608JB1H472KT-NS	<u></u>	<u> </u>	<u> </u>	R R 2		RK3030	Chip R.	MCR03EZHJ221 MCR03EZHJ102	<u></u>	<u> </u>	
2 2 2		Chip C.	C1608JB1H472KT-NS	<u></u>			R23			Chip R.	MCR03EZHJ154	<u></u>		
C11		Chip C.	C1608JB1C473KT-NS				R25			Chip R.	MCR03EZHJ103	<u> </u>	<u> </u>	
C13		Chip tantalum Chip C.	TMCSA1C105MTR C1608CH1H180JT-AS	<u> </u>	<u> </u>		R26 R27		RK3050	Chip R. Chip R.	MCR03EZHJ103 MCR03EZHJ103	<u> </u>	<u></u>	
C15		Chip C.	C1608CH1H180JT-AS	<u></u>	<u></u>	<u>, , , , , , , , , , , , , , , , , , , </u>	R28			Chip R	MCR03EZHJ102	<u></u>	<u></u>	
C17		Chip tantalum	TMCMB1C106MTR	<u></u>			R30			Chip R.	MCR03EZHJ102	<u></u>		
C19		Chip C.	C1608JB1H102K1-AS C1608JB1C104KT-N	<u> </u>			R32			Chip R.	MCR03EZHJ10Z MCR03EZHJ332	<u> </u>		
C21	CU3101 CU3047	Chip C. Chip C.	C1608JB1C473KT-NS C1608JB1H103KT-N	<u> </u>		<u> </u>	R34		RK3034 RK3047	Chip R.	MCR03EZHJ471 MCR03EZHJ562	<u></u>	<u> </u>	
C22		Chip C.	C1608JB1H102KT-AS	<u></u>	<u> </u>		R35			Chip R.	MCR03EZHJ153	<u></u>	<u> </u>	
C24		Chip C.	C1608JB1H102KT-AS				R37			Chip R.	MCR03EZHJ822	. <u></u> .		
C25 C26	CU3035 CU3035	Chip C.	C1608JB1H102KI-AS C1608JB1H102KT-AS				R39		RK3058	Chip R.	MCR03EZHJ473			
C27	CU3035	Chip C.	C1608JB1H102KT-AS	<u></u>	<u> </u>	<u> </u>	R41		RK3062	Chip R.	MCR03EZHJ104 MCR03EZHJ101	<u></u>	<u> </u>	
C29	CS0049	Chip tantalum	TMCSA1C105MTR	<u></u>	<u></u>		R42			Chip R.	MCR03EZHJ103	<u></u>		
C 24		Chip C.	C1608JB1H103KT-N	<u></u>	<u> </u>	<u></u>	77.7			Chip R.	MCR03EZHJ101	<u></u> .		
CN	UE0398	Connector	20-5082-3010-17-100	<u></u>			R47			Chip R.	MCR03EZHJ102	<u></u>		
CN3	UE0035	Mic Connector	EM214-8SMPY	<u> </u>			R49			Chip R.	MCR03EZHJ102	<u> </u>		
D D	XL0069 XL0077	Chip LED	FA1111C-TR FA1111C-TR C,D,ERANK	<u> </u>			R50		RK3070 RK3038	Chip R. Chip R.	MCR03EZHJ474 MCR03EZHJ102	<u></u>		
D D3			FA1111C-TR C,D,ERANK	<u></u>	<u> </u>	<u> </u>	R52			Chip R.	MCR03EZHJ102 MCR03EZHJ104	<u></u>	<u> </u>	
D		Chip LED	FA1111C-TR C,D,ERANK	<u> </u>	<u> </u>	<u> </u>	R54			Chip R.	MCR03EZHJ103 MCR03EZHJ105	<u> </u>	<u> </u>	
B B		Chip Diode	1SS355 TE17	<u> </u>	<u> </u>		R56		_	Chip R.	MCR03EZHJ103	<u></u>		
D10	-	Chip Diode	U1BC44 TE12R				R58			Chip R.	MCR03EZHJ471	<u></u>		
D11		Chip LED Chip Diode	FA1111C-TR C,D,ERANK UDZSTE-17 5.1B	<u> </u>	<u> </u>		R59		RK3026 RK3034	Chip R.	MCR03EZHJ101 MCR03EZHJ471			
D13	XD0165 XD0291	Chip Diode Chip Diode	UDZSTE-17 5.1B MA729-TX	<u> </u>			R61		RK3074 RK3050	Chip R. Chip R.	MCR03EZHJ105 MCR03EZHJ103	<u></u>	<u> </u>	
D15	XD0165	Chip Diode	UDZSTE-17 5.1B MA779-TY	<u> </u>	<u> </u>	<u> </u>	R63			Chip R.	MCR03EZHJ101	<u></u>	<u> </u>	
D17	XD0291	Chip Diode	MA729-TX	<u> </u>			R65			Chip R.	MCR03EZHJ101			
D19		Chip Diode CPU	RLS-73TE-11 M38267M8L269GP	<u> </u>			R66 R67		RK3050	Chip R. Chip R.	MCR03EZHJ103 MCR03EZHJ101			
2 2	XA0604 XA0620	ก ก	24LC32AT-I/SN S-80845ALMP-EA9-T2	<u> </u>			R 68		RK3050	Chip R. Chip R.	MCR03EZHJ103 MCR03EZHJ472	<u></u>	<u> </u>	
2 2 2	XA0675	IC lack	L88MS05TLL-TL HS.12013-01-120	<u> </u>	<u> </u>	<u> </u>	R70			Chip R.	MCR03EZHJ104 MCR03EZHJ684	<u></u>	<u> </u>	
JP3	MACL04GG	Wire	#30AH1-040-H1	<u></u>		T,TG,E,EG	u,			Chip R.	MCR03EZHJ103	<u></u>		
2 5	XU0029	Chip Transistor	DTC114YUA T106				R7.			Chip R.	MCR03EZHJ101	<u> </u>		
8 8	XU0131 XT0110	Chip Transistor Chip Transistor	DTC114EUA T106 2SA1036K T146Q	<u> </u>		<u> </u>	R75		RK3046 RK3032	Chip R. Chip R.	MCR03EZHJ472 MCR03EZHJ331			
2 2	XU0131 XU0131	Chip Transistor Chip Transistor	DTC114EUA T106 DTC114EUA T106	<u> </u>	<u> </u>		R77		RK3028	Chip R. Chip R.	MCR03EZHJ151 MCR03EZHJ102	<u></u>	<u> </u>	
Q Q		Chip Transistor	2SC4081 T106R 2SB1132T 100O	<u></u>		<u> </u>	R 80		RK3038	Chip R.	MCR03EZHJ102 MCR03EZHJ103	<u></u>	<u> </u>	
8 8	XU0029	Chip Transistor	DTC114YUA T106	<u></u>		<u></u>	R :			Chip R.	MCR03EZHJ102	· <u>- ·</u> .		
Q Q Q	XU0148 XU0131		DTC144EUA T106 DTC114EUA T106	<u> </u>	<u> </u>	<u> </u>	R85		RK0008 RK3046	Chip R. Chip R.	ERJ6GEYJ330V MCR03EZHJ472	<u></u>		
2 2		Chip Transistor	DTA114YUA T106	<u> </u>	<u> </u>	<u> </u>	R86			Chip R.	MCR03EZHJ103	<u></u>	<u> </u>	
2 2 2		Chip Transistor	DTA114YUA T106	<u></u>			7 7 7 8 8			Chip R.	MCR03EZHJ103	<u></u> .		
72 Z		Chip R.	MCR03EZHJ000			<u>, -</u>	R90			Chip R.	MCR03EZHJ473			
R R 5 4	RK3054	Chip R.	MCR03EZHJ223	<u> </u>		<u> </u>	R91		RK3050	Chip R. Chip R.	MCR03EZHJ103 MCR03EZHJ331	<u></u>	<u> </u>	
70 : 1 60 :		Chip R.	MCR03EZHJ103	<u></u>			R95			ָ סק נ	MCR03EZHJ104	<u></u>		
교자	RK3023	Chip R.	MCR03EZHJ560				R97			ק <u>ק</u>	MCR03EZHJ103			
R9		Chip R.	MCR03EZHJ102	<u> </u>	<u> </u>	<u> </u>	ᅖ			Dial	RH90N74E20-A90770	<u></u>	<u> </u>	
2	14140002	Cilio	BIO(00015110001	-	f	ľ		9	.0220	Tolay	1 0200	ŀ		L

Ref.	Darte No.	Description	Parts Name		Qty		Ver
No.	raits NO.	Description	Faits Name	DR-135	DR-235	DR-435	VEI
SW1	UU0015Z	Switch	EVQPPXA25	1	1	1	
SW2	UU0015Z	Switch	EVQPPXA25	1	1	1	
SW3	UU0015Z	Switch	EVQPPXA25	1	1	1	
SW4	UU0015Z	Switch	EVQPPXA25	1	1	1	
SW5	UU0015Z	Switch	EVQPPXA25	1	1	1	
SW6	UU0015Z	Switch	EVQPPXA25	1	1	1	
SW7	UU0015Z	Switch	EVQPPXA25	1	1	1	
VR1	RV0035	Variable	EVUF2JFK4B14	1	1	1	
W1	UX1270	Wire	WIRE DR235 W1	1	1	1	
X1	XQ0131	Xtal	CSA310/3.6864MHz	1	1	1	
	TL0024		DIFFUSION SHEET 135	1	1	1	
	YZ0042		CEMENT G17 / 1G	1	1	1	
	ST0068		DIAL FITTING	1	1	1	
	FG0305		LCD RUB.CONNECT. 135	1	1	1	
	TL0023		REFLECTION DR135	1	1	1	
1	DG0037		LCD LIGHT DR135	1	1	1	
1	FM0034		MIC GND PLATE	1	1	1	
	FP0034		MIC SPACER DR110	1	1	1	
	ST0064		LCD HOLDER DR135	1	1	1	

#### Main Unit (DR-135)

Ref.	Parts No.	Description	Parte Name		Qty		Ver
No.	Parts No.	Description	Parts Name	DR-135	DR-235	DR-435	vei
C101	CU3047	Chip C.	C1608JB1H103KT-N	1			
C102	CU3047	Chip C.	C1608JB1H103KT-N	1			
C103	CS0049	Chip tantalum	TMCSA1C105MTR	1			
C104	CU3047	Chip C.	C1608JB1H103KT-N	1			
C105	CS0394	Chip tantalum	TMCMB0J476MTR	1			
C106	CU3051	Chip C.	C1608JB1E223KT-NS	1			
C107	CU3111	Chip C.	C1608JB1C104KT-N	1			
C108	CU3047	Chip C.	C1608JB1H103KT-N	1			
C109	CS0216	Chip tantalum	TMCMB1A106MTR	1			
C110	CU3047	Chip C.	C1608JB1H103KT-N	1			
C111	CU3047	Chip C.	C1608JB1H103KT-N	1			
C112	CU3047	Chip C.	C1608JB1H103KT-N	1			
C113	CU3047	Chip C.	C1608JB1H103KT-N	1			
C114	CU3047	Chip C.	C1608JB1H103KT-N	1			
C115	CU3047	Chip C.	C1608JB1H103KT-N	1			
C116	CU3047	Chip C.	C1608JB1H103KT-N	1			
C117	CU3047	Chip C.	C1608JB1H103KT-N	1			
C118	CU3049	Chip C.	C1608JB1E153KT-NS	1			
C119	CU3051	Chip C.	C1608JB1E223KT-NS	1			
C120	CU3021	Chip C.	C1608CH1H680JT-AS	1			
C121	CU3005	Chip C.	C1608CH1H040CT-AS	1			
C122	CU3002	Chip C.	C1608CH1H010CT-AS	1			
C123	CU3015	Chip C.	C1608CH1H220JT-AS	1			
C124	CU3040	Chip C.	C1608JB1H272KT-NS	1			
C125	CU3044	Chip C.	C1608JB1H562KT-NS	1			
C126	CU3038	Chip C.	C1608JB1H182KT-AS	1			
C127	CU3041	Chip C.	C1608JB1H332KT-NS	1			
C129	CU3111	Chip C.	C1608JB1C104KT-N	1			
C130	CS0049	Chip tantalum	TMCSA1C105MTR	1			
C132	CU3035	Chip C.	C1608JB1H102KT-AS	1			
C133	CU3005	Chip C.	C1608CH1H040CT-AS	1			
C134	CU3042	Chip C.	C1608JB1H392KT-NS	1			
C135	CU3044	Chip C.	C1608JB1H562KT-NS	1			
C137	CU3017	Chip C.	C1608CH1H330JT-AS	1			
C138	CS0049	Chip tantalum	TMCSA1C105MTR	1			
C139	CU3017	Chip C.	C1608CH1H330JT-AS	1			
C140	CU3017	Chip C.	C1608CH1H330JT-AS	1			
C141	CU3111	Chip C.	C1608JB1C104KT-N	1			
C142	CU3111	Chip C.	C1608JB1C104KT-N	1			
C143	CU3111	Chip C.	C1608JB1C104KT-N	1			
C144	CU3047	Chip C.	C1608JB1H103KT-N	1			
C145	CU3003	Chip C	C1608CH1H020CT-AS	1			
C146	CE0339	Electrolytic C.	16MV 10SWB+TS	1			
C148	CU3017	Chip C.	C1608CH1H330JT-AS	1			
C149	CU3017	Chip C.	C1608CH1H330JT-AS	1			
C150	CU3005	Chip C.	C1608CH1H040CT-AS	1			
C151	CU3047	Chip C.	C1608JB1H103KT-N	1	l		
C152	CE0339	Electrolytic C.	16MV 10SWB+TS	1	l		
C153	CU3035	Chip C.	C1608JB1H102KT-AS	1	l		
C154	CU3035	Chip C.	C1608JB1H102KT-AS	1			
C155	CU3007	Chip C.	C1608CH1H060CT-A	1			
C156	CU3047	Chip C.	C1608JB1H103KT-N	1			
C157	CU3035	Chip C.	C1608JB1H102KT-AS	1			
C158	CU3013	Chip C.	C1608CH1H150JT-AS	1			
C159	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	CE0339	Electrolytic C.	16MV 10SWB+TS	1	l		
	CU3111	Chip C.	C1608JB1C104KT-N	1	l		
		Chip C.	C1608JB1H102KT-AS	1			
		Chip C.	C1608JB1C104KT-N	1	l		
	CU3111				l	ıl	
C165	CU3111 CU3047	Chip C.	C1608JB1H103KT-N	l 1			
C165 C167	CU3047	Chip C. Chip C.	C1608JB1H103KT-N C1608JB1C104KT-N				
C165 C167 C168	CU3047 CU3111	Chip C.	C1608JB1C104KT-N	1			
C165 C167 C168 C169	CU3047						

0	No.	Parts No.	Description	Parts Name				Ver
0			<u> </u>			DR-235	DR-435	
c	173	CU3037	Chip C.	C1608JB1H152KT-AS	1			
c	174	CU3029	Chip C.	C1608JB1H331KT-AS	1			
- 1	175	CU3111	Chip C.	C1608JB1C104KT-N	1			
	176	CU3018	Chip C.	C1608CH1H390JT-AS	1			
	177	CU3018	Chip C.	C1608CH1H390JT-AS	1			
- 1	179	CU3111	Chip C.	C1608JB1C104KT-N				
	180	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	181	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	182	CU3047	Chip C.	C1608JB1H103KT-N	1			
	183	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	184	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	185	CS0232	Chip tantalum	TMCMA1V474MTR	1			
	186	CU3008	Chip C.	C1608CH1H070CT-A	1			
	187	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	188	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	189	CU3011	Chip C.	C1608CH1H100DT-AS	1			
	190	CU3047	Chip C.	C1608JB1H103KT-N	1			
	191	CU3102	Chip C.	C1608JB1C333KT-NS	1			
	192	CU3047	Chip C.	C1608JB1H103KT-N	1			
	193	CU4033	Chip C.	GRM42-6X7R102K500PT	1			
	194	CU3012	Chip C.	C1608CH1H120JT-AS	1			
	195	CU3012	Chip C.	C1608CH1H120JT-AS	1			
	196	CU3023	Chip C.	C1608CH1H101JT-AS	1			
	197	CU4003	Chip C.	GRM42-6CK020C500PT	1			
	198	CE0339	Electrolytic C.	16MV 10SWB+TS	1			
	199	CE0339	Electrolytic C.	16MV 10SWB+TS	1			
	200	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	201	CU4014	Chip C.	GRM42-6CH180J500PT	1			
	202	CU4016	Chip C.	GRM42-6CH270J500PT	1			
	203	CU4016	Chip C.	GRM42-6CH270J500PT	1			
	204	CU4013	Chip C.	GRM42-6CH150J500PT	1			
	205	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	206	CE0339	Electrolytic C.	16MV 10SWB+TS	1			
	207	CU3002	Chip C.	C1608CH1H010CT-AS	1			
	208	CU3002	Chip C.	C1608CH1H010CT-AS	1			
	209	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	210	CU3003	Chip C.	C1608CH1H020CT-AS	1			
	211	CU3003	Chip C.	C1608CH1H020CT-AS	1			
	212	CE0364	Electrolytic C.	16MV 47SWB+TS	1			
	213	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	214	CU3015	Chip C.	C1608CH1H220JT-AS	1			
	215	CU4016	Chip C.	GRM42-6CH270J500PT	1			
	216	CU4016	Chip C.	GRM42-6CH270J500PT	1			
	217	CU3051	Chip C.	C1608JB1E223KT-NS	1			
	218	CU3051	Chip C.	C1608JB1E223KT-NS	1			
	219	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	220	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	2221	CU3047	Chip C.	C1608JB1H103KT-N	1			
	2222	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	223	CE0364	Electrolytic C.	16MV 47SWB+TS	1			
	224	CU3023	Chip C.	C1608CH1H101JT-AS	1			
	2225	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	226	CU3035	Chip C.	C1608JB1H102KT-AS	1			
1	227	CS0049	Chip tantalum	TMCSA1C105MTR	1			
		CU3035	Chip C.	C1608JB1H102KT-AS	1			
	229	CU3101	Chip C.	C1608JB1C473KT-NS	1			
	230	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	231	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	232	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	233	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	234	CU3035	Chip C.	C1608JB1H102KT-AS	1			
	235	CU3014	Chip C.	C1608CH1H180JT-AS	1 1			
	236	CU3014	Chip C.	C1608CH1H180JT-AS	1			
	237	CU3035	Chip C. Chip tantalum	C1608JB1H102KT-AS	1			
	238	CS0049		TMCSA1C105MTR				
	239	CS0049 CE0339	Chip tantalum Electrolytic C.	TMCSA1C105MTR 16MV 10SWB+TS	1 1			
	240	CE0339 CU3022	Chip C.	C1608CH1H820JT-AS	1			
	241	CU3022 CU3051	Chip C.	C1608JB1E223KT-NS	1			
					1			
	243	CE0339 CE0339	Electrolytic C. Electrolytic C.	16MV 10SWB+TS 16MV 10SWB+TS	1			
					1			
	245	CS0049	Chip tantalum	TMCSA1C105MTR	1			
	246	CU3043	Chip C.	C1608JB1H472KT-NS	1			
	247	CU3111	Chip C.	C1608JB1C104KT-N	1			
	248	CU3047	Chip C.	C1608JB1H103KT-N	1			
	249	CU3038	Chip C.	C1608JB1H182KT-AS				
	250	CU3026	Chip C.	C1608CH1H181JT-AS	1			
	251	CE0339	Electrolytic C.	16MV 10SWB+TS	1			
	252	CU3035	Chip C.	C1608JB1H102KT-AS	1			
10	253	CU3111	Chip C.	C1608JB1C104KT-N	1			
	254	CU3111	Chip C.	C1608JB1C104KT-N	1			
c	255	CE0364	Electrolytic C.	16MV 47SWB+TS	1			
c	256	CU3111	Chip C.	C1608JB1C104KT-N	1			
c			Electrolytic C.	16MV 10SWB+TS	1		1	
0	257	CE0339						
	257 258	CS0049	Chip tantalum	TMCSA1C105MTR	1			
	257 258 259	CS0049 CU3035	Chip tantalum Chip C.	C1608JB1H102KT-AS	1			
	257 258	CS0049	Chip tantalum					

Ref.	Parts No.	Description	Parts Name	Qty DR-136 DR-236 DR	Ver	Ref.	Parts No.	Description	Parts Name	Qty DR-135 DR-235	DR-435	Ver
C263	CE0100	Electrolytic C.	16MV 22UW	1		D117	XD0254	Chip Diode	1SS355 TE17	1		
C264	CU3031	Chip C.	C1608JB1H471KT-AS	1		D118	XD0130	Chip Diode	DA204U T106	1 1		
C265 C266	CU3035 CU3064	Chip C. Chip C.	C1608JB1H102KT-AS C1608CH1H1R5CT-AS	1 1		D119 D120	XD0254 XD0131	Chip Diode Chip Diode	1SS355 TE17 1SV214 TPH4	1		
C267	CU3035	Chip C.	C1608JB1H102KT-AS	1		D121	XD0131 XD0274	Diode	DSA3A1	1		
C268	CU3035	Chip C.	C1608JB1H102KT-AS	1		D122	XD0300	Chip Diode	1SV262TPH2	1		
C269	CU3035	Chip C.	C1608JB1H102KT-AS	1 1		D123	XD0300	Chip Diode	1SV262TPH2	1		
C270	CU3047	Chip C.	C1608JB1H103KT-N	1		D124	XD0131	Chip Diode	1SV214 TPH4	1 1		
C271 C272	CU3035 CS0220	Chip C. Chip tantalum	C1608JB1H102KT-AS TMCMA1C225MTR	1 1		D125 D126	XD0272 XD0254	Chip Diode Chip Diode	1SS356 TW11 1SS355 TE17	1 1		
C273	CS0220 CS0220	Chip tantalum	TMCMA1C225MTR			D127	XD0254 XD0165	Chip Diode	UDZSTE-17 5.1B			
C274	CU3016	Chip C.	C1608CH1H270JT-AS	1 1		D128	XD0291	Chip Diode	MA729-TX	1		
C275	CU3047	Chip C.	C1608JB1H103KT-N	1		D129	XD0291	Chip Diode	MA729-TX	1		
C276	CE0339	Electrolytic C.	16MV 10SWB+TS	1		D130	XD0254	Chip Diode	1SS355 TE17	1 1		
C277	CE0343	Electrolytic C.	16MV 1000HC+T	1 1		FL101 FL102	XC0070 XC0052	Ceramic Filter Ceramic Filter	ALFYM450E=K ALFYM450G=K	1		
C278 C279	CU3035 CU3051	Chip C. Chip C.	C1608JB1H102KT-AS C1608JB1E223KT-NS			IC101	XA0675	IC	L88MS05TLL-TL			
C280	CU3016	Chip C.	C1608CH1H270JT-AS			IC102	XA0348	IC	TC4W53FU(TE12)	1 1		
C281	CU3009	Chip C.	C1608CH1H080CT-A	1		IC103	XA0348	IC	TC4W53FU(TE12)	1		
C282	CU3064	Chip C.	C1608CH1H1R5CT-AS	1 1		IC104	XA0596	IC	NJM2902V-TE1	1		
C283	CU3027	Chip C.	C1608CH1H221JT-AS	1 1		IC108	XA0223	IC	TK10930VTL	1 1		
C284	CU3002	Chip C.	C1608CH1H010CT-AS	1 1		IC109	XA0115	IC IC	TC4S66F TE85R	1		
C285	CU3035	Chip C.	C1608JB1H102KT-AS	1 1		IC110 IC111	XA0412 XA0236	IC IC	M67746 BU4052BCF-E2	1		
C286 C287	CU3027 CS0063	Chip C. Chip tantalum	C1608CH1H221JT-AS TMCSA1V104MTR	1 1		IC111	XA0236 XA0449	IC IC	UPC2710T-E3			
C288	CU3011	Chip C.	C1608CH1H100DT-AS	1		IC113	XA0348	IC	TC4W53FU(TE12)	1		
C289	CU3051	Chip C.	C1608JB1E223KT-NS	1		IC114	XA0068	ic	M5218AFP/600E	1		
C290	CU3035	Chip C.	C1608JB1H102KT-AS	1		IC115	XA0102	IC	NJM7808FA	1		
C291	CU3011	Chip C.	C1608CH1H100DT-AS	1		IC116	XA0352	IC	M64076GP	1		
C292	CU3035	Chip C.	C1608JB1H102KT-AS	1 1		IC117	XA0410	IC	LA4425A	1		
C293 C294	CU3035	Chip C.	C1608JB1H102KT-AS	1 1		JK101 JK102	UJ0046 UJ0024Z	Jack Jack	MJ82-1 LGY6501-0600	1		
C294 C295	CU3035 CU3047	Chip C. Chip C.	C1608JB1H102KT-AS C1608JB1H103KT-N	1 1		L101	QC0043	Chip Inductor	NL322522T-2R2J-3			
C296	CU3011	Chip C.	C1608CH1H100DT-AS			L102	QA0084	Coil	HELICAL FILTER	1		
C297	CU3035	Chip C.	C1608JB1H102KT-AS	1		L103	QA0084	Coil	HELICAL FILTER	1		
C298	CU3009	Chip C.	C1608CH1H080CT-A	1		L104	QA0084	Coil	HELICAL FILTER	1		
C299	CU3047	Chip C.	C1608JB1H103KT-N	1 1		L105	QA0084	Coil	HELICAL FILTER	1 1		
C300	CU3015	Chip C.	C1608CH1H220JT-AS	1 1		L106	QC0067 QC0065	Chip Inductor Chip Inductor	NL322522T-R10JA	1		
C301 C302	CU3023 CU3023	Chip C. Chip C.	C1608CH1H101JT-AS C1608CH1H101JT-AS			L107 L108	QC0065	Chip Inductor	NL322522T-068JA NL322522T-068JA			
C303	CU3023	Chip C.	C1608CH1H101JT-AS			L111	QKA45E	Coil	MR3.0 4.5T 0.8			
C304	CU3047	Chip C.	C1608JB1H103KT-N	1 1		L112	QKA35D	Coil	MR3.0 3.5T 0.6	1		
C305	CU3047	Chip C.	C1608JB1H103KT-N	1 1		L113	QKA45E	Coil	MR3.0 4.5T 0.8	1		
C306	CU3111	Chip C.	C1608JB1C104KT-N	1 1		L114	QKA45E	Coil	MR3.0 4.5T 0.8	1 1		
C307	CU3047	Chip C.	C1608JB1H103KT-N	1 1		L115 L116	QKA45E QKA45E	Coil Coil	MR3.0 4.5T 0.8 MR3.0 4.5T 0.8	1		
C308 C309	CE0342 CU3051	Electrolytic C. Chip C.	16MV 470HC+TS C1608JB1E223KT-NS			L117	QC0065	Chip Inductor	NL322522T-068JA	'		
C310	CU3023	Chip C.	C1608CH1H101JT-AS	1		L118	QKA95D	Coil	MR3.0 9.5T 0.6	1 1		
C311	CU3035	Chip C.	C1608JB1H102KT-AS	1		L119	QC0039	Chip Inductor	NL322522T-1R0J-3	1		
C312	CU3011	Chip C.	C1608CH1H100DT-AS	1 1		L120	QC0063	Chip Inductor	NL322522T-047JA	1		
C313	CU3035	Chip C.	C1608JB1H102KT-AS	1 1		L121	QC0043	Chip Inductor	NL322522T-2R2J-3	1		
C314	CS0237	Chip tantalum	TMCMA1A475MTR TMCMA1A475MTR	1 1		L122 L123	QC0040 QA0127	Chip Inductor Coil	NL322522T-1R2J-3 VCO QA0127 5CBM	1		
C315 C316	CS0237 CS0237	Chip tantalum Chip tantalum	TMCMA1A475MTR			L123	QC0442	Chip Inductor	MLF1608A1R0K-T			
	CS0237	Chip tantalum	TMCMA1A475MTR	1 1		L125	QC0430	Chip Inductor	MLF1608DR10K-T	1		
	CU3035	Chip C.	C1608JB1H102KT-AS	1		L126	QC0040	Chip Inductor	NL322522T-1R2J-3	1		
C319	CS0237	Chip tantalum	TMCMA1A475MTR	1 1		L127	QC0126	Chip Inductor	NL322522T-R22J-3	1		
	CS0237	Chip tantalum	TMCMA1A475MTR	1		L128	QC0125	Chip Inductor	NL322522T-R18J-3	1		
	CS0220 CU3035	Chip tantalum Chip C.	TMCMA1C225MTR C1608JB1H102KT-AS	1 1		Q101 Q102	XU0131 XU0131	Chip Transistor	DTC114EUA T106 DTC114EUA T106			
	CU3035 CU3018	Chip C.	C1608JB1H102K1-AS C1608CH1H390JT-AS	1 1		Q102	XU0047	Chip Transistor	UMC3NTR			
	CU3016	Chip C.	C1608CH1H270JT-AS	1			XU0131	Chip Transistor	DTC114EUA T106	1		
C325	CU3018	Chip C.	C1608CH1H390JT-AS	1		Q105	XT0096	Chip Transistor	2SC4099 T106N	1		
	CU3029	Chip C.	C1608JB1H331KT-AS	1		Q106	XE0028	FET	3SK131V12-T1	1		
	CU3034	Chip C.	C1608JB1H821KT-AS	1 1		Q107	XE0028	FET Chin Transistor	3SK131V12-T1	1		
	UE0369 UE0397	Connector Connector	AXN49301616 10-5082-3110-17-100	1 1			XU0131 XU0131	Chip Transistor Chip Transistor	DTC114EUA T106 DTC114EUA T106			
	UE0397	Connector	10-5082-3110-17-100			Q111	XE0021	FET	2SK880GR TE85L			
	UA0037Y	Wire	DC CABLE UA0037	1 1		Q112	XT0096	Chip Transistor	2SC4099 T106N	1		
CN105	UE0394	Connector	PI28A15M	1 1		Q113	XU0047	Chip Transistor	UMC3NTR	1		
	UE0043	Connector	PI22A02M	1			XU0131	Chip Transistor	DTC114EUA T106	1		
	UE0393	Connector	PI28A11M	1			XT0084	Chip Transistor	2SC2954 T1	1		
	UE0341 XD0246	Connector Chip Diode	PI28A02M DAN235UT 106			Q116 Q117	XT0112 XT0095	Transistor Chip Transistor	2SB1292F 2SC4081 T106R			
	XD0246 XD0299	Chip Diode	MA304-TX				XT0093	Chip Transistor	2SA1576A T106R	<u>i</u>		
	XD0299	Chip Diode	MA304-TX				XU0148		DTC144EUA T106	1		
	XD0299	Chip Diode	MA304-TX	1		Q120	XU0131	Chip Transistor	DTC114EUA T106	1		
	XD0299	Chip Diode	MA304-TX	1 1		Q121	XU0178	Chip Transistor		1		
	XD0250	Chip Diode	MA742 TX	1		Q122	XT0099	Chip Transistor	2SA1736 TE12R	1		
		Chip Diode	DAN235UT 106	1			XT0061	Chip Transistor	2SB1132T 100Q	1		
	XD0130 XD0301	Chip Diode Chip Diode	DA204U T106 1SV268-TD	1 1		Q124 Q125	XU0047 XE0021	Chip Transistor FET	UMC3NTR 2SK880GR TE85L			
	XD0301 XD0013	Diode	MI407	1		Q125	1		DTC114EUA T106			
	XD0250	Chip Diode	MA742 TX			Q127	XT0095	Chip Transistor	2SC4081 T106R	1		
		Chip Diode	MA742 TX	1 1		Q128	XU0131	Chip Transistor	DTC114EUA T106	1		
	XD0254	Chip Diode	1SS355 TE17	1 1			XU0148	Chip Transistor	DTC144EUA T106	1		
	XD0246	Chip Diode	DAN235UT 106	1		Q130	XU0112	Chip Transistor	DTA114YUA T106	1		
	XD0254 XD0165	Chip Diode Chip Diode	1SS355 TE17 LIDZSTE-17 5 1B	1 1		Q131 Q132	XE0010 XU0131	FET Chin Transistor	2SK508K52 T2B DTC114EUA T106	1		
34	VD0 100	Pourh Pione	UDZSTE-17 5.1B			<u>  U132</u>	V00191	TOTHE HAUSISTOL	IDTOTIMEDA LIDO			

Ref.	Parts No.	Description	Parts Name	Qty DR-135 DR-235 DR-435	Ver	Ref.	Parts No.	Description	Parts Name	Qty DR-135 DR-235 DR-	Ver
Q133	XU0131	Chip Transistor	DTC114EUA T106	1		R189	RK3038	Chip R.	MCR03EZHJ102	1	
Q134	XT0124	Chip Transistor	2SC4215-Y(TE85L)	1 1		R190	RK3038	Chip R.	MCR03EZHJ102	1	
Q135	XT0124	Chip Transistor	2SC4215-Y(TE85L)	1		R191	RK3038	Chip R.	MCR03EZHJ102	1	
Q136	XU0148	Chip Transistor	DTC144EUA T106	1 1		R192	RK3058	Chip R.	MCR03EZHJ473	1	
Q137	XU0131	Chip Transistor	DTC114EUA T106	1		R193	RK3043	Chip R.	MCR03EZHJ272	1	
Q138	XU0131	Chip Transistor	DTC114EUA T106	1		R195	RK3070	Chip R.	MCR03EZHJ474	1	
Q139	XT0095	Chip Transistor	2SC4081 T106R			R196 R197	RK3038 RK3050	Chip R.	MCR03EZHJ102 MCR03EZHJ103	1	
Q140 Q141	XT0095 XU0148	Chip Transistor Chip Transistor	2SC4081 T106R DTC144EUA T106			R197	RK3042	Chip R. Chip R.	MCR03EZHJ222		
Q141	XU0148	Chip Transistor	DTC144EUA T106			R199	RK3042	Chip R.	MCR03EZHJ222		
R101	RK3050	Chip R.	MCR03EZHJ103			R200	RK3070	Chip R.	MCR03EZHJ474	1	
R102	RK3091	Chip R.	MCR03EZPFX3902			R201	RK3042	Chip R.	MCR03EZHJ222		
R103	RK3091	Chip R.	MCR03EZPFX3902	1 1		R202	RK0028	Chip R.	ERJ6GEYJ471V	1	
R104	RK3050	Chip R.	MCR03EZHJ103	1 1		R203	RK3056	Chip R.	MCR03EZHJ333	1 1	
R105	RK3028	Chip R.	MCR03EZHJ151	1 1		R204	RK3062	Chip R.	MCR03EZHJ104	1	
R106	RK3026	Chip R.	MCR03EZHJ101	1 1		R205	RK0069	Chip R.	ERJ6GEYJ104V	1	
R107	RK3026	Chip R.	MCR03EZHJ101	1 1		R206	RK0001	Chip R.	ERJ6GEYJ100V	1	
R109	RK3026	Chip R.	MCR03EZHJ101	1		R207	RK3052	Chip R.	MCR03EZHJ153	1	
R110	RK3026	Chip R.	MCR03EZHJ101	1		R208	RK3034	Chip R.	MCR03EZHJ471	1	
R111	RK3026	Chip R.	MCR03EZHJ101	1		R209	RK3061	Chip R.	MCR03EZHJ823	1	
R112	RK3026	Chip R.	MCR03EZHJ101	1		R210	RK3038	Chip R.	MCR03EZHJ102	1	
R113 R114	RK3042 RK3041	Chip R. Chip R.	MCR03EZHJ222 MCR03EZHJ182			R211 R212	RK4018 RK4026	Chip R. Chip R.	ERJ12YJ220U ERJ12YJ101U		
	RK3041	Chip R.	MCR03EZHJ272			R213	RK3049	Chip R.	MCR03EZHJ822		
R116	RK3034	Chip R.	MCR03EZHJ272 MCR03EZHJ471	I il I		R214	RK3050	Chip R.	MCR03EZHJ103		
R117	RK3062	Chip R.	MCR03EZHJ104	I il I		R215	RK3043	Chip R.	MCR03EZHJ272		
	RK3026	Chip R.	MCR03EZHJ101	i		R216	RK3042	Chip R.	MCR03EZHJ222	1	
R119	RK3052	Chip R.	MCR03EZHJ153	<sub>1</sub>		R217	RK3042	Chip R.	MCR03EZHJ222	1	
R120	RK3045	Chip R.	MCR03EZHJ392	1		R218	RK3058	Chip R.	MCR03EZHJ473	1	
R121	RK3063	Chip R.	MCR03EZHJ124	1		R219	RK3042	Chip R.	MCR03EZHJ222	1	
R122	RK3059	Chip R.	MCR03EZHJ563	1 1		R220	RK4034	Chip R.	ERJ12YJ471U	1	
R123	RK3061	Chip R.	MCR03EZHJ823	1		R221	RK3052	Chip R.	MCR03EZHJ153	1	
R124	RK3057	Chip R.	MCR03EZHJ393	1		R222	RK3050	Chip R.	MCR03EZHJ103	1	
R125	RK3038	Chip R.	MCR03EZHJ102	1		R223	RK3026	Chip R.	MCR03EZHJ101	1	
R126	RK3052	Chip R.	MCR03EZHJ153	1		R224	RK4024	Chip R.	ERJ12YJ680U	1	
R128	RK3058	Chip R.	MCR03EZHJ473	1		R225	RK3017	Chip R.	MCR03EZHJ180		
R129	RK3050	Chip R.	MCR03EZHJ103			R226 R227	RK3015 RK3030	Chip R. Chip R.	MCR03EZHJ120	1	
R130 R131	RK3060 RK3061	Chip R. Chip R.	MCR03EZHJ683 MCR03EZHJ823			R228	RK3062	Chip R.	MCR03EZHJ221 MCR03EZHJ104		
R132	RK3050	Chip R.	MCR03EZHJ103			R229	RK3045	Chip R.	MCR03EZHJ392		
R133	RK3037	Chip R.	MCR03EZHJ821			R230	RK3033	Chip R.	MCR03EZHJ391		
R134	RK3055	Chip R.	MCR03EZHJ273			R231	RK3033	Chip R.	MCR03EZHJ391	1	
R135	RK3062	Chip R.	MCR03EZHJ104			R232	RK3031	Chip R.	MCR03EZHJ271	1 1	
R136	RK3050	Chip R.	MCR03EZHJ103	1 1		R233	RK3031	Chip R.	MCR03EZHJ271	1	
R137	RK3067	Chip R.	MCR03EZHJ274	1 1		R234	RK3054	Chip R.	MCR03EZHJ223	1 1	
R138	RK3059	Chip R.	MCR03EZHJ563	1		R235	RK3053	Chip R.	MCR03EZHJ183	1	
R139	RK3050	Chip R.	MCR03EZHJ103	1 1		R236	RK3050	Chip R.	MCR03EZHJ103	1	
R140	RK3072	Chip R.	MCR03EZHJ684	1		R237	RK3026	Chip R.	MCR03EZHJ101	1	
R141	RK3064	Chip R.	MCR03EZHJ154	1		R238	RK3062	Chip R.	MCR03EZHJ104	1	
R142	RK3054	Chip R.	MCR03EZHJ223	1		R239	RK3050	Chip R.	MCR03EZHJ103	1	
R143 R144	RK3043	Chip R.	MCR03EZHJ272 MCR03EZHJ222			R240 R241	RK3038 RK3051	Chip R. Chip R.	MCR03EZHJ102 MCR03EZHJ123		
R144	RK3042 RK3050	Chip R. Chip R.	MCR03EZHJ22Z MCR03EZHJ103			R241	RK3044	Chip R.	MCR03EZHJ332		
	RK3062	Chip R.	MCR03EZHJ104				RK3054	Chip R.	MCR03EZHJ223		
	RK3001	Chip R.	MCR03EZHJ000				RK3068	Chip R.	MCR03EZHJ334		
	RK3050	Chip R.	MCR03EZHJ103			R245	RK3038	Chip R.	MCR03EZHJ102	1	
	RK3001	Chip R.	MCR03EZHJ000			R246	RK3046	Chip R.	MCR03EZHJ472	1	
	RK3048	Chip R.	MCR03EZHJ682	1		R247	RK3050	Chip R.	MCR03EZHJ103	1	
R154	RK3042	Chip R.	MCR03EZHJ222	[ 1] [		R248	RK3070	Chip R.	MCR03EZHJ474	1	
	RK3052	Chip R.	MCR03EZHJ153	1		R249	RK3042	Chip R.	MCR03EZHJ222	1	
	RK3034	Chip R.	MCR03EZHJ471	1		R250	RK3070	Chip R.	MCR03EZHJ474	1	
	RK3062	Chip R.	MCR03EZHJ104	<u> </u>		R251	RK3050	Chip R.	MCR03EZHJ103	1	
	RK3030	Chip R.	MCR03EZHJ221			R252	RK3070	Chip R.	MCR03EZHJ474		
	RK3062	Chip R.	MCR03EZHJ104 MCR03EZHJ104			R253 R254	RK3057 RK3057	Chip R.	MCR03EZHJ393		
	RK3062 RK3021	Chip R. Chip R.	MCR03EZHJ104 MCR03EZHJ390			R254	RK3057	Chip R. Chip R.	MCR03EZHJ393 MCR03EZHJ472		
	RK3021	Chip R.	MCR03EZHJ100			R256	RK3046	Chip R.	MCR03EZHJ472 MCR03EZHJ101		
	RK3014	Chip R.	MCR03EZHJ100	I il I		R257	RK3046	Chip R.	MCR03EZHJ472		
	RK3074	Chip R.	MCR03EZHJ105	[ 1 ]		R258	RK3057	Chip R.	MCR03EZHJ393	1	
	RK3038	Chip R.	MCR03EZHJ102	1		R259	RK3050	Chip R.	MCR03EZHJ103	1	
	RK3055	Chip R.	MCR03EZHJ273	1		R260	RK3054	Chip R.	MCR03EZHJ223	1	
	RK3054	Chip R.	MCR03EZHJ223	[ 1] [		R261	RK3054	Chip R.	MCR03EZHJ223	1	
	RK3038	Chip R.	MCR03EZHJ102	1		R262	RK3067	Chip R.	MCR03EZHJ274	1	
	RK3062	Chip R.	MCR03EZHJ104	1			RK3052	Chip R.	MCR03EZHJ153	1	
	RK3062	Chip R.	MCR03EZHJ104	1		R264	RK3038	Chip R.	MCR03EZHJ102	1	
	RK3026	Chip R.	MCR03EZHJ101	<u> </u>		R265	RK3047	Chip R.	MCR03EZHJ562	1	
	RK3026		MCR03EZHJ101	<u> </u>		R266	RK3050	Chip R.	MCR03EZHJ103		
	RK3050	Chip R.	MCR03EZHJ103			R267	RK3022	Chip R.	MCR03EZHJ470		
	RK3054	Chip R.	MCR03EZHJ223			R268	RK3050	Chip R.	MCR03EZHJ103		
	RK3074	Chip R.	MCR03EZHJ105			R269 R270	RK3062 RK3060	Chip R. Chip R.	MCR03EZHJ104 MCR03EZHJ683		
	RK3034 RK3066	Chip R. Chip R.	MCR03EZHJ471 MCR03EZHJ224			R270	RK4034	Chip R.	ERJ12YJ471U		
	RK3042	Chip R.	MCR03EZHJ222	I il I		R272	RK3050	Chip R.	MCR03EZHJ103		
	RK3074	Chip R.	MCR03EZHJ105	I il I			RK3062	Chip R.	MCR03EZHJ104		
	RK3058	Chip R.	MCR03EZHJ473			R274	RK3050	Chip R.	MCR03EZHJ103	1	
	RK3070	Chip R.	MCR03EZHJ474	1		R275	RK3050	Chip R.	MCR03EZHJ103	1	
	RK3026	Chip R.	MCR03EZHJ101	1			RK3034	Chip R.	MCR03EZHJ471	1	
	RK3058	Chip R.	MCR03EZHJ473	[ 1] [		R277	RK3042	Chip R.	MCR03EZHJ222	1	
R188	RK3026	Chip R.	MCR03EZHJ101	1 1		R278	RK3026	Chip R.	MCR03EZHJ101	1 1	

Ref. No.	Parts No.	Description	Parts Name	DR-135 DR-		Ver	1	Ref. No.	Parts No.	Description	Parts Name
R279	RK3046	Chip R.	MCR03EZHJ472	1	1	1	1	C109	CS0216	Chip tantalum	TMCMB1A106MTR
R280	RK3058	Chip R.	MCR03EZHJ473	1				C110	CU3047	Chip C.	C1608JB1H103KT-N
R281	RK3041	Chip R.	MCR03EZHJ182	1			1	1	CU3047	Chip C.	C1608JB1H103KT-N
R282	RK3050	Chip R.	MCR03EZHJ103	1 1			1	1	CU3047	Chip C.	C1608JB1H103KT-N
R283	RK3038 RK3026	Chip R.	MCR03EZHJ102	1 1			1	1	CU3047	Chip C.	C1608JB1H103KT-N
R284 R285	RK3026 RK3054	Chip R. Chip R.	MCR03EZHJ101 MCR03EZHJ223				1	1	CU3047	Chip C.	C1608JB1H103KT-N
R286	RK3034	Chip R.	MCR03EZHJ471				1	1	CU3047 CU3047	Chip C. Chip C.	C1608JB1H103KT-N C1608JB1H103KT-N
R287	RK3046	Chip R.	MCR03EZHJ472				1	C118	CU3047	Chip C.	C1608JB1E153KT-NS
R288	RK3046	Chip R.	MCR03EZHJ472	1 1			1		CU3051	Chip C.	C1608JB1E223KT-NS
R289	RK3046	Chip R.	MCR03EZHJ472	1			1	1	CU3021	Chip C.	C1608CH1H680JT-AS
R290	RK3054	Chip R.	MCR03EZHJ223	1			1	C121	CU3003	Chip C.	C1608CH1H020CT-AS
R291	RK3022	Chip R.	MCR03EZHJ470	1			1	C122	CU3002	Chip C.	C1608CH1H010CT-AS
R292	RK3018	Chip R.	MCR03EZHJ220	1			1	C123	CU3013	Chip C.	C1608CH1H150JT-AS
R293	RK3042	Chip R.	MCR03EZHJ222	1 1			1	1	CU3040	Chip C.	C1608JB1H272KT-NS
R294	RK3052	Chip R.	MCR03EZHJ153	1			1	1	CU3044	Chip C.	C1608JB1H562KT-NS
R295	RK3038	Chip R.	MCR03EZHJ102	] ]			1	1	CU3038	Chip C.	C1608JB1H182KT-AS
R297 R298	RK3050 RK3042	Chip R. Chip R.	MCR03EZHJ103 MCR03EZHJ222	1 1			1		CU3041	Chip C.	C1608JB1H332KT-NS
R299	RK3042 RK3042	Chip R.	MCR03EZHJ222				1	C129 C130	CU3111 CS0220	Chip C. Chip tantalum	C1608JB1C104KT-N TMCMA1C225MTR
R300	RK3026	Chip R.	MCR03EZHJ101				1	1	CU3027	Chip C.	C1608CH1H221JT-AS
R301	RK3038	Chip R.	MCR03EZHJ102	l il			1	C133	CU3003	Chip C.	C1608CH1H020CT-AS
R302	RK3024	Chip R.	MCR03EZHJ680	l 1			1	1	CU3042	Chip C.	C1608JB1H392KT-NS
R303	RK3056	Chip R.	MCR03EZHJ333	1			1	C135	CU3044	Chip C.	C1608JB1H562KT-NS
R304	RK3059	Chip R.	MCR03EZHJ563	1			1	1	CU3015	Chip C.	C1608CH1H220JT-AS
R305	RK3058	Chip R.	MCR03EZHJ473	1			1	C138	CS0049	Chip tantalum	TMCSA1C105MTR
R306	RK3076	Chip R.	MCR03EZHJ155	1			1	C139	CU3015	Chip C.	C1608CH1H220JT-AS
R307	RK3001	Chip R.	MCR03EZHJ000	1			1	C140	CU3015	Chip C.	C1608CH1H220JT-AS
R308	RK3076	Chip R.	MCR03EZHJ155	1			1	C141	CU3111	Chip C.	C1608JB1C104KT-N
R309	RK3050	Chip R.	MCR03EZHJ103	1 1			1	1	CU3111	Chip C.	C1608JB1C104KT-N
R310	RK3026	Chip R.	MCR03EZHJ101	1 1			1	1	CU3111	Chip C.	C1608JB1C104KT-N
R311	RK3038	Chip R.	MCR03EZHJ102 MCR03EZHJ102	1 1			1	1	CU3009	Chip C.	C1608CH1H080CT-A
R312 R313	RK3038 RK3038	Chip R. Chip R.	MCR03EZHJ102 MCR03EZHJ102				1	1	CU3003 CE0339	Chip C. Electrolytic C.	C1608CH1H020CT-AS 16MV 10SWB+TS
R314	RK3022	Chip R.	MCR03EZHJ470				1	1	CU3019	Chip C.	C1608CH1H470JT-AS
R315	RK3042	Chip R.	MCR03EZHJ222	l il			1	1	CU3023	Chip C.	C1608CH1H101JT-AS
R316	RK3051	Chip R.	MCR03EZHJ123	1			1	1	CU3002	Chip C.	C1608CH1H010CT-AS
R318	RK3050	Chip R.	MCR03EZHJ103	1			1	1	CU3035	Chip C.	C1608JB1H102KT-AS
R319	RK3062	Chip R.	MCR03EZHJ104	1			1	C152	CE0339	Electrolytic C.	16MV 10SWB+TS
R320	RK3062	Chip R.	MCR03EZHJ104	1			1	C153	CU3035	Chip C.	C1608JB1H102KT-AS
R321	RK3043	Chip R.	MCR03EZHJ272	1			1	C154	CU3035	Chip C.	C1608JB1H102KT-AS
R322	RD0108	Jumper	J1/6Z	1 1			1	C155	CU3012	Chip C.	C1608CH1H120JT-AS
R323	RK3001	Chip R.	MCR03EZHJ000	1 1			1	1	CU3047	Chip C.	C1608JB1H103KT-N
R324	RK3014 RK3066	Chip R. Chip R.	MCR03EZHJ100	1 1			1	C157	CU3035	Chip C.	C1608JB1H102KT-AS
R325 R326	RK3038	Chip R.	MCR03EZHJ224 MCR03EZHJ102				1	C158 C159	CU3013 CU3018	Chip C. Chip C.	C1608CH1H150JT-AS C1608CH1H390JT-AS
R327	RK3092	Chip R.	MCR03EZPFX7502				1		CE03339	Electrolytic C.	16MV 10SWB+TS
R328	RD3013	Resistor	ERX1SJ100	l il			1	1	CU3111	Chip C.	C1608JB1C104KT-N
R329	RK3062	Chip R.	MCR03EZHJ104	1			1	C162	CU3035	Chip C.	C1608JB1H102KT-AS
R330	RK3062	Chip R.	MCR03EZHJ104	1			1	1	CU3111	Chip C.	C1608JB1C104KT-N
R331	RK3038	Chip R.	MCR03EZHJ102	1			1	C168	CU3111	Chip C.	C1608JB1C104KT-N
R332	RK3054	Chip R.	MCR03EZHJ223	1			1	C169	CU3027	Chip C.	C1608CH1H221JT-AS
R333	RK3062	Chip R.	MCR03EZHJ104	1			1	1	CU3003	Chip C.	C1608CH1H020CT-AS
R334	RK3042	Chip R.	MCR03EZHJ222	1			1	1	CU3111	Chip C.	C1608JB1C104KT-N
	RK3050	Chip R.	MCR03EZHJ103	1			1		CU3035	Chip C.	C1608JB1H102KT-AS
	TS0032B CT0012	Case Trimmer C.	VCO CASE	1			1		CU3035	Chip C.	C1608JB1H102KT-AS
	XS0031	Thermistor	CTZ3S-10A-W1-P NTCCM16084BH682KCT				1	1	CU3029	Chip C.	C1608JB1H331KT-AS
	RH0146	Trimmer R.	MVR22HXBRN473				1		CU3111 CU3002	Chip C. Chip C.	C1608JB1C104KT-N C1608CH1H010CT-AS
	RH0148	Trimmer R.	MVR22HXBRN104				1		CU3002 CU3015	Chip C.	C1608CH1H220JT-AS
	RH0142	Trimmer R.	MVR22HXBRN103	l il			1	1	CU3111	Chip C.	C1608JB1C104KT-N
	RH0142	Trimmer R.	MVR22HXBRN103	1			1	1	CU3035	Chip C.	C1608JB1H102KT-AS
VR105	RH0142	Trimmer R.	MVR22HXBRN103	1			1	1	CU3047	Chip C.	C1608JB1H103KT-N
VR106	RH0146	Trimmer R.	MVR22HXBRN473	1			1	1	CU3035	Chip C.	C1608JB1H102KT-AS
	RH0140	Trimmer R.	MVR22HXBRN472	1			1	C184	CU3035	Chip C.	C1608JB1H102KT-AS
	RH0148	Trimmer R.	MVR22HXBRN104	1			1	C185	CS0061	Chip tantalum	TMCSA1V224MTR
	XK0003	Discriminator	CDBM450C7	1			1	C186	CU3013	Chip C.	C1608CH1H150JT-AS
	XQ0112	Xtal	UM-5 21.250MHZ	1			1	1	CU3035	Chip C.	C1608JB1H102KT-AS
	XF0041	Xtal Filter	UM5 21.7M 21R15A5	1		1	1	1	CU3035	Chip C.	C1608JB1H102KT-AS
XF102	XF0041	Xtal Filter	UM5 21.7M 21R15A5	1		1	1	1	CU3011	Chip C.	C1608CH1H100DT-AS
	UP0400B	P.C.B	DR135 INTEGRATED	1 1		1		1	CU3047	Chip C.	C1608JB1H103KT-N
	SD0034	Spring	GND SPRING DR130	3		1		1	CU3102	Chip C.	C1608JB1C333KT-NS
	TZ0072		SHEET SILICON DUMPER	3		1		1	CU4033	Chip C.	GRM42-6X7R102K500
	TZ0049 FG0327		CUSHION DR135	3 1		1		1	CU3008	Chip C.	C1608CH1H070CT-A
	I G0021	I	COLUCION DO				_		CU3010 CU3013	Chip C. Chip C.	C1608CH1H090CT-A C1608CH1H150JT-AS
								IC190	CE03013	onip o.	16MV 106MB T6

### Main Unit (DR-235)

Ref.	Parte No	Description	Parts Name		Qty		Ver
No.	raits NO.	Description	Faits Name	DR-135	DR-235	DR-435	VEI
C101	CU3047	Chip C.	C1608JB1H103KT-N		1		
C102	CU3047	Chip C.	C1608JB1H103KT-N		1		
C103	CS0049	Chip tantalum	TMCSA1C105MTR	l	1		
C104	CU3047	Chip C.	C1608JB1H103KT-N		1		
C105	CS0394	Chip tantalum	TMCMB0J476MTR		1		
C106	CU3051	Chip C.	C1608JB1E223KT-NS		1		
C107	CU3111	Chip C.	C1608JB1C104KT-N	l	1		
C108	CU3047	Chip C.	C1608JB1H103KT-N	l	1		

C113	CU3047	Chip C.	C1608JB1H103KT-N		1	
C114	CU3047	Chip C.	C1608JB1H103KT-N		1	
C115	CU3047	Chip C.	C1608JB1H103KT-N		1	
C117	CU3047	Chip C.	C1608JB1H103KT-N		1	
C118 C119	CU3049 CU3051	Chip C.	C1608JB1E153KT-NS		1	
C120	CU3021	Chip C. Chip C.	C1608JB1E223KT-NS C1608CH1H680JT-AS		1	
C120	CU3003	Chip C.	C1608CH1H020CT-AS			
C121	CU3002	Chip C.	C1608CH1H010CT-AS		1	
C122	CU3013	Chip C.	C1608CH1H150JT-AS			
C124	CU3040	Chip C.	C1608JB1H272KT-NS			
C125	CU3044	Chip C.	C1608JB1H562KT-NS		1	
C126	CU3038	Chip C.	C1608JB1H182KT-AS		1	
C127	CU3041	Chip C.	C1608JB1H332KT-NS		1	
C129	CU3111	Chip C.	C1608JB1C104KT-N		1	
C130	CS0220	Chip tantalum	TMCMA1C225MTR		1	
C132	CU3027	Chip C.	C1608CH1H221JT-AS		1	
C133	CU3003	Chip C.	C1608CH1H020CT-AS		1	
C134	CU3042	Chip C.	C1608JB1H392KT-NS		1	
C135	CU3044	Chip C.	C1608JB1H562KT-NS		1	
C137	CU3015	Chip C.	C1608CH1H220JT-AS		1	
C138	CS0049	Chip tantalum	TMCSA1C105MTR		1	
C139	CU3015	Chip C.	C1608CH1H220JT-AS		1	
C140	CU3015	Chip C.	C1608CH1H220JT-AS		1	
C141	CU3111	Chip C.	C1608JB1C104KT-N		1	
C142	CU3111	Chip C.	C1608JB1C104KT-N		1	
C143	CU3111	Chip C.	C1608JB1C104KT-N		1	
C144	CU3009	Chip C.	C1608CH1H080CT-A		1	
C145	CU3003	Chip C.	C1608CH1H020CT-AS		1	
C146	CE0339	Electrolytic C.	16MV 10SWB+TS		1	
C148	CU3019	Chip C.	C1608CH1H470JT-AS		1	1
C149	CU3023	Chip C.	C1608CH1H101JT-AS			
C150 C151	CU3002 CU3035	Chip C. Chip C.	C1608CH1H010CT-AS C1608JB1H102KT-AS		1	
	CE03339	I .	16MV 10SWB+TS		1	
C152 C153	CU3035	Electrolytic C. Chip C.	C1608JB1H102KT-AS		1	
C154	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C155	CU3012	Chip C.	C1608CH1H120JT-AS		1	
C156	CU3047	Chip C.	C1608JB1H103KT-N		1	
C157	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C158	CU3013	Chip C.	C1608CH1H150JT-AS		1	
C159	CU3018	Chip C.	C1608CH1H390JT-AS		1	
C160	CE0339	Electrolytic C.	16MV 10SWB+TS		1	
C161	CU3111	Chip C.	C1608JB1C104KT-N		1	
C162	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C165	CU3111	Chip C.	C1608JB1C104KT-N		1	
C168	CU3111	Chip C.	C1608JB1C104KT-N		1	
C169	CU3027	Chip C.	C1608CH1H221JT-AS		1	
C170	CU3003	Chip C.	C1608CH1H020CT-AS		1	
C171	CU3111	Chip C.	C1608JB1C104KT-N		1	
C172	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C173	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C174	CU3029	Chip C.	C1608JB1H331KT-AS		1	
C175	CU3111	Chip C.	C1608JB1C104KT-N		1	
C176	CU3002	Chip C.	C1608CH1H010CT-AS		1	
C177	CU3015	Chip C.	C1608CH1H220JT-AS		1	
C179	CU3111	Chip C.	C1608JB1C104KT-N		1	
C180	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C182	CU3047	Chip C.	C1608JB1H103KT-N		1	
C183	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C184	CU3035 CS0061	Chip C.	C1608JB1H102KT-AS		1	
C185 C186	CS0061 CU3013	Chip tantalum Chip C.	TMCSA1V224MTR C1608CH1H150JT-AS		1	1
C187	CU3013	Chip C.	C1608JB1H102KT-AS			1
C188	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C189	CU3033	Chip C.	C1608CH1H100DT-AS		1	1
C190	CU3047	Chip C.	C1608JB1H103KT-N		1	
C191	CU3102	Chip C.	C1608JB1C333KT-NS		1	1
C193	CU4033	Chip C.	GRM42-6X7R102K500PT		1	1
C194	CU3008	Chip C.	C1608CH1H070CT-A		1	
C195	CU3010	Chip C.	C1608CH1H090CT-A		1	1
C196	CU3013	Chip C.	C1608CH1H150JT-AS		1	
C198	CE0339	Electrolytic C.	16MV 10SWB+TS		1	1
C199	CE0339	Electrolytic C.	16MV 10SWB+TS		1	1
C200	CU3035	Chip C.	C1608JB1H102KT-AS		1	
C201	CU4011	Chip C.	GRM42-6CH100D500PT		1	1
C202	CU4013	Chip C.	GRM42-6CH150J500PT		1	1
C203	CU4013	Chip C.	GRM42-6CH150J500PT		1	
C204	CU4008	Chip C.	GRM42-6CH070D500PT		1	1
C205	CU3035	Chip C.	C1608JB1H102KT-AS		1	1
C206	CE0339	Electrolytic C.	16MV 10SWB+TS		1	
C207	CU3002	Chip C.	C1608CH1H010CT-AS		1	1
	CU3002	Chip C.	C1608CH1H010CT-AS		1	
C208		I Chin C	C1608JB1H102KT-AS	i	1	1
C208 C209 C209	CU3035 CU3035	Chip C. Chip C.	C1608JB1H102KT-AS		1	- 1

Ver

Ref.	Parts No.	Description	Parts Name	DR-135	Qty DR-235 DR-436	Ver	Ref.	Parts No.	Description	Parts Name	DR-135	Qty DR-235	DR-435	Ver
C211	CU3003	Chip C.	C1608CH1H020CT-AS		1		CN102	UE0397	Connector	10-5082-3110-17-100		1		
C212	CE0364	Electrolytic C.	16MV 47SWB+TS		1		CN103	UE0397	Connector	10-5082-3110-17-100		1		
C213	CU3035	Chip C.	C1608JB1H102KT-AS		1		CN104	UA0037Y	Connector	DC CABLE UA0037		1		
C215	CU4013	Chip C.	GRM42-6CH150J500PT		1		CN 105	UE0394	Connector	PI28A15M		1		
C216	CU4013	Chip C.	GRM42-6CH150J500PT		1			UE0043	Connector	PI22A02M		1		
C217	CU3051	Chip C.	C1608JB1E223KT-NS		1			UE0393	Connector	PI28A11M		1		
C218	CU3051	Chip C.	C1608JB1E223KT-NS		1			UE0341	Connector	PI28A02M		1		
C219	CU3035	Chip C.	C1608JB1H102KT-AS		1		D101	XD0112	Chip Diode	1SV128 TE85L		1		
C220	CU3035	Chip C.	C1608JB1H102KT-AS		]		D102	XD0131	Chip Diode	1SV214 TPH4		]		
C221 C222	CU3047 CU3035	Chip C. Chip C.	C1608JB1H103KT-N C1608JB1H102KT-AS				D103 D104	XD0131 XD0131	Chip Diode Chip Diode	1SV214 TPH4 1SV214 TPH4				
	CE0100	Electrolytic C.	16MV 22UW				D104	XD0131	Chip Diode	1SV214 TPH4		'		
C224	CU3023	Chip C.	C1608CH1H101JT-AS		1		D106	XD0250	Chip Diode	MA742 TX		1		
C225	CU3035	Chip C.	C1608JB1H102KT-AS		1		D107	XD0131	Chip Diode	1SV214 TPH4		1		
C226	CU3035	Chip C.	C1608JB1H102KT-AS		1		D108	XD0130	Chip Diode	DA204U T106		1		
C227	CS0049	Chip tantalum	TMCSA1C105MTR		1		D109	XD0301	Chip Diode	1SV268-TD		1		
C228	CU3035	Chip C.	C1608JB1H102KT-AS		1		D110	XD0013	Diode	MI407		1		
C229	CU3101	Chip C.	C1608JB1C473KT-NS		1		D111	XD0250	Chip Diode	MA742 TX		1		
C230	CU3035	Chip C.	C1608JB1H102KT-AS		1		D112	XD0250	Chip Diode	MA742 TX		1		
C231	CU3035	Chip C.	C1608JB1H102KT-AS		1		D113	XD0254	Chip Diode	1SS355 TE17		1		
C232 C233	CU3035 CU3011	Chip C. Chip C.	C1608JB1H102KT-AS C1608CH1H100DT-AS				D114 D115	XD0246 XD0254	Chip Diode Chip Diode	DAN235UT 106 1SS355 TE17		¦		
C234	CU3035	Chip C.	C1608JB1H102KT-AS				D117	XD0254 XD0254	Chip Diode	1SS355 TE17		'		
C235	CU3003	Chip C.	C1608CH1H020CT-AS				D118	XD0130	Chip Diode	DA204U T106		1		
C237	CU3035	Chip C.	C1608JB1H102KT-AS		1		D119	XD0254	Chip Diode	1SS355 TE17		1		
C238	CS0049	Chip tantalum	TMCSA1C105MTR		1		D120	XD0254	Chip Diode	1SS355 TE17		1		
C239	CS0049	Chip tantalum	TMCSA1C105MTR		1		D121	XD0274	Chip Diode	DSA3A1		1		
C240	CE0339	Electrolytic C.	16MV 10SWB+TS		1		D124	XD0131	Chip Diode	1SV214 TPH4		1		
C241	CU3022	Chip C.	C1608CH1H820JT-AS		1		D127	XD0165	Chip Diode	CHIP UDZSTE-17 5.1B		1		
C242	CU3051	Chip C.	C1608JB1E223KT-NS		1		D128	XD0291	Chip Diode	MA729-TX		1		
C243	CE0339	Electrolytic C.	16MV 10SWB+TS		1		D129	XD0291	Chip Diode	MA729-TX		1		
C244	CE0339	Electrolytic C.	16MV 10SWB+TS		1			XC0047 XC0036	Ceramic Filter	ALFYM455E=K		1		
C245 C246	CS0049 CU3043	Chip tantalum Chip C.	TMCSA1C105MTR C1608JB1H472KT-NS				IC101	XA0675	Ceramic Filter IC	ALFYM455G L88MS05TLL-TL		'		
C246	CU3043 CU3111	Chip C.	C1608JB1C104KT-N					XA0348	ic ic	TC4W53FU(TE12)		'		
C248	CU3047	Chip C.	C1608JB1H103KT-N					XA0348	IC	TC4W53FU(TE12)		1		
C249	CU3038	Chip C.	C1608JB1H182KT-AS		1			XA0596	IC	NJM2902V-TE1		1		
C250	CU3026	Chip C.	C1608CH1H181JT-AS		1		IC108		IC	TK10930VTL		1		
C251	CE0339	Electrolytic C.	16MV 10SWB+TS		1		IC109	XA0115	IC	TC4S66F TE85R		1		
C252	CU3008	Chip C.	C1608CH1H070CT-A		1		IC110	XA0591	IC	M68729		1		
C253	CU3111	Chip C.	C1608JB1C104KT-N		1			XA0236	IC	BU4052BCF-E2		1		
C254	CU3111	Chip C.	C1608JB1C104KT-N		1			XA0119	IC	AN8010M E1		1		
C255	CE0364	Electrolytic C.	16MV 47SWB+TS		1			XA0348	IC	TC4W53FU(TE12)		1		
C256	CU3111	Chip C.	C1608JB1C104KT-N		1			XA0068	IC	M5218AFP/600E		1		
C257 C258	CE0339 CS0049	Electrolytic C. Chip tantalum	16MV 10SWB+TS TMCSA1C105MTR				IC115	XA0102 XA0410	IC IC	NJM7808FA LA4425A		'		
C259	CU3035	Chip C.	C1608JB1H102KT-AS					UJ0046	Jack	MJ82-1		'		
C260	CE0339	Electrolytic C.	16MV 10SWB+TS		1			UJ0024Z	Jack	LGY6501-0600		1		
C261	CU3035	Chip C.	C1608JB1H102KT-AS		1			RD0108	Jumper	J1/6Z		1		
C262	CU3111	Chip C.	C1608JB1C104KT-N		1		L101	QC0043	Chip Inductor	NL322522T-2R2J-3		1		
C263	CS0220	Chip tantalum	TMCMA1C225MTR		1		L102	QA0155	Coil	E544ENAS-110251		1		
C264	CU3035	Chip C.	C1608JB1H102KT-AS		1		L103	QA0155	Coil	E544ENAS-110251		1		
C265	CU3035	Chip C.	C1608JB1H102KT-AS		1		L104	QA0155	Coil	E544ENAS-110251		1		
	CU3007	Chip C.	C1608CH1H060CT-A		1		L105	QA0155	Coil	E544ENAS-110251		1		
1	CU3035	Chip C.	C1608JB1H102KT-AS		1					NL322522T-033JA		1		
	CU3035 CU3047	Chip C. Chip C.	C1608JB1H102KT-AS C1608JB1H103KT-N				L107 L111	QA0155 QKA35E	Coil Coil	E544ENAS-110251 MR3.0 3.5T 0.8		1 1		
C271	CU3035	Chip C.	C1608JB1H102KT-AS				L112	QKA25D	Coil	MR3.0 2.5T 0.6				
	CE0339	Electrolytic C.	16MV 10SWB+TS				L113	QKA35E	Coil	MR3.0 3.5T 0.8		1		
	CU3018	Chip C.	C1608CH1H390JT-AS		1		L114		Coil	MR3.0 3.5T 0.8		1		
	CU3047	Chip C.	C1608JB1H103KT-N		1		L115	· .	Coil	MR3.0 3.5T 0.8		1		
	CE0343	Electrolytic C.	16MV 1000HC+T		1		L116		Coil	MR3.0 3.5T 0.8		1		
	CU3035	Chip C.	C1608JB1H102KT-AS		1		L117	QC0061	Chip Inductor	NL322522T-033JA		1		
	CU3019	Chip C.	C1608CH1H470JT-AS		1		L118	QKA95D	Coil	MR3.0 9.5T 0.6		1		
	CU3027	Chip C.	C1608CH1H221JT-AS		1		L119	QC0061	Chip Inductor	NL322522T-033JA		1		
	CU3011	Chip C.	C1608CH1H100DT-AS		1			XU0131		DTC114EUA T106		1		
	CU3035 CU3035	Chip C.	C1608JB1H102KT-AS		]			XU0131 XU0131		DTC114EUA T106		1		
	CU3035 CU3035	Chip C. Chip C.	C1608JB1H102KT-AS C1608JB1H102KT-AS				Q104 Q105	XT0096	Chip Transistor Chip Transistor	DTC114EUA T106 2SC4099 T106N		1		
	CU3035 CU3015	Chip C.	C1608CH1H220JT-AS				Q105		FET	3SK184 TX S		¦		
	CU4011	Chip C.	GRM42-6CH100D500PT				Q100	XE0013	FET	3SK184 TX S		1		
	CU3023	Chip C.	C1608CH1H101JT-AS		1			XU0131		DTC114EUA T106		1		
	CU3023	Chip C.	C1608CH1H101JT-AS		1			XU0131		DTC114EUA T106		1		
C303	CU3023	Chip C.	C1608CH1H101JT-AS		1		Q111	XE0021	FET	2SK880GR TE85L		1		
	CU3047	Chip C.	C1608JB1H103KT-N		1			XT0125		2SC4245-Y(TE85L)		1		
	CU3111	Chip C.	C1608JB1C104KT-N		1			XU0047	Chip Transistor			1		
	CU3047	Chip C.	C1608JB1H103KT-N		1			XT0084	Chip Transistor			1		
	CE0342	Electrolytic C.	16MV 470HC+TS		1		Q116	XT0112	Transistor	2SB1292F		1		
	CU3051	Chip C.	C1608JB1E223KT-NS		1		Q117	XT0095		2SC4081 T106R		1		
	CU3023 CS0237	Chip C. Chip tantalum	C1608CH1H101JT-AS TMCMA1A475MTR					XT0094 XU0148		2SA1576A T106R DTC144EUA T106		1		
	CS0237 CS0237	Chip tantalum	TMCMA1A475MTR					XU0146 XU0131		DTC144EUA T106				
	CS0237	Chip tantalum	TMCMA1A475MTR				Q121	XU0178		XP1215-TX		1		
	CS0237	Chip tantalum	TMCMA1A475MTR		1		Q122	XT0099		2SA1736 TE12R		1		
	CU3035	Chip C.	C1608JB1H102KT-AS		1			XT0061		2SB1132T 100Q		1		
	CS0237	Chip tantalum	TMCMA1A475MTR		1		Q124	XU0047		UMC3NTR		1		
	CS0237	Chip tantalum	TMCMA1A475MTR		1		Q125	XE0021	FET	2SK880GR TE85L		1		
	CS0220	Chip tantalum	TMCMA1C225MTR		1		Q126	XU0131		DTC114EUA T106		1		
C322	CU3035	Chip C.	C1608JB1H102KT-AS		1		Q127	XT0095	Unip Transistor	2SC4081 T106R		1		

Ref.	Parts No.	Description	Parts Name	DR-135	Qty DR-235	DR-435	Ver	Ref.	Parts No.	Description	Parts Name	DR-135	Qty DR-235 DR-435	Ver
Q128	XU0131	Chip Transistor	DTC114EUA T106		1			R193	RK3043	Chip R.	MCR03EZHJ272		1	
Q129	XU0148		DTC144EUA T106		1			R195	RK3070	Chip R.	MCR03EZHJ474		1 1	
Q130	XU0112		DTA114YUA T106		1			R196	RK3038	Chip R.	MCR03EZHJ102		1	
Q131	XT0030	Chip Transistor	2SC3356T1BR24/25		1			R198	RK3050	Chip R.	MCR03EZHJ103		1	
Q132 Q133	XU0131 XU0131		DTC114EUA T106 DTC114EUA T106		1			R200 R202	RK3070 RK0028	Chip R. Chip R.	MCR03EZHJ474 ERJ6GEYJ471V		1	
Q136	XU0148	Chip Transistor	DTC144EUA T106		1			R203	RK3056	Chip R.	MCR03EZHJ333			
Q137	XU0131		DTC114EUA T106		1			R204	RK3062	Chip R.	MCR03EZHJ104			
Q139	XT0095	Chip Transistor	2SC4081 T106R		1			R205	RK0069	Chip R.	ERJ6GEYJ104V		1 1	
Q140	XT0095		2SC4081 T106R		1			R206	RK0001	Chip R.	ERJ6GEYJ100V		1	
Q141	XU0148	Chip Transistor	DTC144EUA T106		1			R207	RK3052	Chip R.	MCR03EZHJ153		1 1	
Q142	XU0148	Chip Transistor	DTC144EUA T106		1			R208	RK3028	Chip R.	MCR03EZHJ151		1 1	
R101	RK3050	Chip R.	MCR03EZHJ103		1			R209	RK3061	Chip R.	MCR03EZHJ823		1	
R102	RK3091	Chip R.	MCR03EZPFX3902		1			R210	RK3038	Chip R.	MCR03EZHJ102		1	
R103 R104	RK3091 RK3050	Chip R. Chip R.	MCR03EZPFX3902 MCR03EZHJ103		1			R211 R212	RK4018 RK4026	Chip R. Chip R.	ERJ12YJ220U ERJ12YJ101U			
R105	RK3028	Chip R.	MCR03EZHJ151		1			R213	RK3049	Chip R.	MCR03EZHJ822			
R106	RK3026	Chip R.	MCR03EZHJ101		1			R214	RK3050	Chip R.	MCR03EZHJ103			
R107	RK3026	Chip R.	MCR03EZHJ101		1			R215	RK3041	Chip R.	MCR03EZHJ182		1	
R108	RK3023	Chip R.	MCR03EZHJ560		1			R216	RK3042	Chip R.	MCR03EZHJ222		1 1	
R109	RK3026	Chip R.	MCR03EZHJ101		1			R217	RK3042	Chip R.	MCR03EZHJ222		1 1	
R110	RK3050	Chip R.	MCR03EZHJ103		1			R218	RK3058	Chip R.	MCR03EZHJ473		1	
R111	RK3001	Chip R.	MCR03EZHJ000		1			R219	RK3042	Chip R.	MCR03EZHJ222			
R112	RK3026	Chip R.	MCR03EZHJ101		1			R220	RK4034	Chip R.	ERJ12YJ471U		1	
R114 R115	RK3041 RK3043	Chip R. Chip R.	MCR03EZHJ182 MCR03EZHJ272		1			R221 R222	RK3052 RK3050	Chip R. Chip R.	MCR03EZHJ153 MCR03EZHJ103	l		
R116	RK3043 RK3038	Chip R.	MCR03EZHJ272 MCR03EZHJ102		1		- 1	R222	RK3050 RK3026	Chip R.	MCR03EZHJ103 MCR03EZHJ101			
R117	RK3036	Chip R.	MCR03EZHJ564		1		1	R224	RK4026	Chip R.	ERJ12YJ101U	l		
R118	RK3026	Chip R.	MCR03EZHJ101		1		1	R225	RK3001	Chip R.	MCR03EZHJ000		1	
R119	RK3052	Chip R.	MCR03EZHJ153		1		1	R226	RK3026	Chip R.	MCR03EZHJ101		1	
R120	RK3045	Chip R.	MCR03EZHJ392		1			R227	RK3030	Chip R.	MCR03EZHJ221		1 1	
R121	RK3063	Chip R.	MCR03EZHJ124		1			R228	RK3062	Chip R.	MCR03EZHJ104		1 1	
R122	RK3059	Chip R.	MCR03EZHJ563		1			R229	RK3048	Chip R.	MCR03EZHJ682		1	
R123	RK3061	Chip R.	MCR03EZHJ823		1			R230	RK3054	Chip R.	MCR03EZHJ223		1	
R124 R125	RK3057 RK3036	Chip R. Chip R.	MCR03EZHJ393		1			R231 R232	RK3050 RK3050	Chip R. Chip R.	MCR03EZHJ103		1	
R126	RK3049	Chip R.	MCR03EZHJ681 MCR03EZHJ822		1			R234	RK3054	Chip R.	MCR03EZHJ103 MCR03EZHJ223			
R128	RK3060	Chip R.	MCR03EZHJ683		1			R235	RK3053	Chip R.	MCR03EZHJ183			
R129	RK3050	Chip R.	MCR03EZHJ103		1			R236	RK3050	Chip R.	MCR03EZHJ103			
R130	RK3060	Chip R.	MCR03EZHJ683		1			R237	RK3026	Chip R.	MCR03EZHJ101		1 1	
R131	RK3061	Chip R.	MCR03EZHJ823		1			R238	RK3062	Chip R.	MCR03EZHJ104		1 1	
R132	RK3050	Chip R.	MCR03EZHJ103		1			R239	RK3050	Chip R.	MCR03EZHJ103		1 1	
R133	RK3037	Chip R.	MCR03EZHJ821		1			R240	RK3038	Chip R.	MCR03EZHJ102		1	
R134	RK3055	Chip R.	MCR03EZHJ273		1			R241	RK3051	Chip R.	MCR03EZHJ123		1	
R135	RK3052	Chip R.	MCR03EZHJ153		1			R242	RK3044	Chip R.	MCR03EZHJ332		1	
R136 R137	RK3050 RK3067	Chip R. Chip R.	MCR03EZHJ103 MCR03EZHJ274		1			R243 R244	RK3054 RK3068	Chip R. Chip R.	MCR03EZHJ223 MCR03EZHJ334			
R138	RK3059	Chip R.	MCR03EZHJ563		1			R245	RK3038	Chip R.	MCR03EZHJ102		l il l	
R139	RK3050	Chip R.	MCR03EZHJ103		1			R246	RK3046	Chip R.	MCR03EZHJ472		1	
R140	RK3072	Chip R.	MCR03EZHJ684		1			R247	RK3050	Chip R.	MCR03EZHJ103		1 1	
R141	RK3064	Chip R.	MCR03EZHJ154		1			R248	RK3070	Chip R.	MCR03EZHJ474		1	
R142	RK3057	Chip R.	MCR03EZHJ393		1			R249	RK3042	Chip R.	MCR03EZHJ222		1 1	
R143	RK3050	Chip R.	MCR03EZHJ103		1			R250	RK3070	Chip R.	MCR03EZHJ474		1	
		Chip R.	MCR03EZHJ222		1				RK3050	Chip R.	MCR03EZHJ103			
R147	RK3050 RK3062	Chip R. Chip R.	MCR03EZHJ103 MCR03EZHJ104		1				RK3070 RK3057	Chip R. Chip R.	MCR03EZHJ474 MCR03EZHJ393			
R151	RK3052	Chip R.	MCR03EZHJ103		1			R254	RK3057	Chip R.	MCR03EZHJ393			
	RK3001	Chip R.	MCR03EZHJ000		1				RK3046	Chip R.	MCR03EZHJ472		l il l	
		Chip R.	MCR03EZHJ103		1			R256	RK3026	Chip R.	MCR03EZHJ101		1	
R155	RK3052	Chip R.	MCR03EZHJ153		1			R257	RK3046	Chip R.	MCR03EZHJ472		1 1	
R156	RK3034	Chip R.	MCR03EZHJ471		1		1	R258	RK3057	Chip R.	MCR03EZHJ393		1	
R157	RK3062	Chip R.	MCR03EZHJ104		1		1	R259	RK3050	Chip R.	MCR03EZHJ103		1	
1	RK3026	Chip R.	MCR03EZHJ101		1		- 1	R260	RK3054	Chip R.	MCR03EZHJ223		1	
	RK3062 RK3062	Chip R. Chip R.	MCR03EZHJ104 MCR03EZHJ104		1		1	R261 R262	RK3054 RK3068	Chip R. Chip R.	MCR03EZHJ223 MCR03EZHJ334		1	
R162	RK3062 RK3023	Chip R.	MCR03EZHJ560		1		- 1	R262	RK3050	Chip R.	MCR03EZHJ3334 MCR03EZHJ103	l		
	RK3023	Chip R.	MCR03EZHJ100		1		1	R264	RK3038	Chip R.	MCR03EZHJ103			
1	RK3014	Chip R.	MCR03EZHJ100		1		1		RK3047	Chip R.	MCR03EZHJ562			
		Chip R.	MCR03EZHJ105		1		- 1	R266	RK3050	Chip R.	MCR03EZHJ103	l	1	
R167	RK3052	Chip R.	MCR03EZHJ153		1		1	R267	RK3030	Chip R.	MCR03EZHJ221		1	
	RK3054	Chip R.	MCR03EZHJ223		1		1	R269	RK3062	Chip R.	MCR03EZHJ104		1	
	RK3062	Chip R.	MCR03EZHJ104		1		- 1	R271	RK4034	Chip R.	ERJ12YJ471U	l	1	
		Chip R.	MCR03EZHJ104		1		1		RK3050	Chip R.	MCR03EZHJ103		1	
		Chip R.	MCR03EZHJ101		1		1		RK3062	Chip R.	MCR03EZHJ104		1	
R174 R176	RK3034 RK3050	Chip R. Chip R.	MCR03EZHJ471		1		1	R274 R275	RK3050 RK3022	Chip R.	MCR03EZHJ103 MCR03EZHJ470			
	RK3050	Chip R.	MCR03EZHJ103 MCR03EZHJ105		1		1		RK3022 RK3042	Chip R. Chip R.	MCR03EZHJ470 MCR03EZHJ222			
	RK3074	Chip R.	MCR03EZHJ000		1		- 1		RK3042 RK3046	Chip R.	MCR03EZHJ472			
R181	RK3042	Chip R.	MCR03EZHJ222		1				RK3058	Chip R.	MCR03EZHJ473	l	1	
R182	RK3062	Chip R.	MCR03EZHJ104		1		1	R281	RK3041	Chip R.	MCR03EZHJ182		1	
1	RK3074	Chip R.	MCR03EZHJ105		1		- 1	R282	RK3050	Chip R.	MCR03EZHJ103		1	
R184	RK3057	Chip R.	MCR03EZHJ393		1		1	R283	RK3038	Chip R.	MCR03EZHJ102		1	
	RK3070	Chip R.	MCR03EZHJ474		1		1	R284	RK3030	Chip R.	MCR03EZHJ221		1	
R186	RK3026	Chip R.	MCR03EZHJ101		1		- 1	R285	RK3050	Chip R.	MCR03EZHJ103	l	1	
1	RK3058	Chip R.	MCR03EZHJ473		1		1		RK3045	Chip R.	MCR03EZHJ392		1	
R189 R190	RK3038 RK3038	Chip R. Chip R.	MCR03EZHJ102 MCR03EZHJ102		1		1	R287 R288	RK3046 RK3014	Chip R. Chip R.	MCR03EZHJ472 MCR03EZHJ100			
	RK3038	Chip R.	MCR03EZHJ102 MCR03EZHJ102		1		- 1		RK3014 RK3038	Chip R.	MCR03EZHJ100 MCR03EZHJ102			
R192	RK3054	Chip R.	MCR03EZHJ223		1		1		RK3000	Chip R.	MCR03EZHJ000			
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Ref.	Parts No.	Description	Parts Name		Qty		Ver
No.			110000000000000000000000000000000000000	DR-135	_	DR-435	
R295	RK3038	Chip R.	MCR03EZHJ102		1		
R297	RK3050	Chip R.	MCR03EZHJ103		1		
R303	RK3057	Chip R.	MCR03EZHJ393		1		
R304	RK3057	Chip R.	MCR03EZHJ393		1		
R306	RK3076	Chip R.	MCR03EZHJ155		1		
R308	RK3076	Chip R.	MCR03EZHJ155		1		
R309	RK3050	Chip R.	MCR03EZHJ103		1		
R311	RK3038	Chip R.	MCR03EZHJ102		1		
R312	RK3038	Chip R.	MCR03EZHJ102		1		
R313	RK3038	Chip R.	MCR03EZHJ102		1		
R315	RK3042	Chip R.	MCR03EZHJ222		1		
R316	RK3051	Chip R.	MCR03EZHJ123		1		
R318	RK3050	Chip R.	MCR03EZHJ103		1		
R319	RK3062	Chip R.	MCR03EZHJ104		1		
R320	RK3062	Chip R.	MCR03EZHJ104		1		
R322	RD0108	Jumper	J1/6Z		1		
R323	RK3001	Chip R.	MCR03EZHJ000		1		
R324	RK3014	Chip R.	MCR03EZHJ100		1		
R325	RK3066	Chip R.	MCR03EZHJ224		1		
R326	RK3038	Chip R.	MCR03EZHJ102		1		
R327	RK3092	Chip R.	MCR03EZPFX7502		1		
R328	RD3013	Resistor	ERX1SJ100		1		
R329	RK3062	Chip R.	MCR03EZHJ104		1		
R330	RK3062	Chip R.	MCR03EZHJ104		1		
R331	RK3040	Chip R.	MCR03EZHJ152		1		
R332	RK3054	Chip R.	MCR03EZHJ223		1		
R333	RK3062	Chip R.	MCR03EZHJ104		1		
R334	RK3042	Chip R.	MCR03EZHJ222		1		
TC101	CT0012	Trimmer	CTZ3S-10A-W1-P		1		
TH101	XS0031	Thermistor	NTCCM16084BH682KCT		1		
VR101	RH0146	Trimmer R.	MVR22HXBRN473		1		
	RH0148	Trimmer R.	MVR22HXBRN104		1		
	RH0142	Trimmer R.	MVR22HXBRN103		1		
	RH0144	Trimmer R.	MVR22HXBRN223		1		
	RH0142	Trimmer R.	MVR22HXBRN103		l 1		
	RH0146	Trimmer R.	MVR22HXBRN473		l i		
	RH0140	Trimmer R.	MVR22HXBRN472		l i		
	RH0148	Trimmer R.	MVR22HXBRN104		1		
W101	MBAG02GG	l	#22BH1-020-H1		1		
1	MBCL02GG		#30BH1-020-H1		1		
X101	XK0002	Discriminator	CDBM455C7		1		
X101	XQ0096	Xtal	12.8MHZ 5PPM UM5				
X103	XQ0058A	Xtal	UM-5 30.395MHZ		1		
	XF0014Z	Xtal Filter	30M152A 30.85MHZ				
125 101		Alai Fillei					
1	SD0034		GND SPRING DR130		1		
1	TS0164A		VCO CASE DR235		1		
1	TZ0049		SILICON DUMPER		1		
	TZ0072	D O D	SHEET		1		
$\Box$	UP0414	P.C.Board			1		

٧	CO	Unit	(DR-235)

Ref.	Parte No.	Description	Parts Name	Qty			Ver
No.	i dits ito.	Description	T uits Huile	DR-135	DR-235	DR-435	VCI
	CU3039	Chip C.	C1608JB1H222KT-AS		1		
	CU3051	Chip C.	C1608JB1E223KT-NS		1		
	CS0220	Chip tantalum	TMCMA1C225MTR		1		
C506	CS0220	Chip tantalum	TMCMA1C225MTR		1		
	CU3035	Chip C.	C1608JB1H102KT-AS		1		
	CS0063	Chip tantalum	TMCSA1V104MTR		1		
C511	CU3047	Chip C.	C1608JB1H103KT-N		1		
C512	CU3047	Chip C.	C1608JB1H103KT-N		1		
C513	CU3008	Chip C.	C1608CH1H070CT-A		1		
C514	CU3035	Chip C.	C1608JB1H102KT-AS		1		
C515	CU3006	Chip C.	C1608CH1H050CT-AS		1		
C516	CU3035	Chip C.	C1608JB1H102KT-AS		1		
C517	CU3035	Chip C.	C1608JB1H102KT-AS		1		
C518	CU3003	Chip C.	C1608CH1H020CT-AS		1		
C519	CU3035	Chip C.	C1608JB1H102KT-AS		1		
C520	CS0382	Chip tantalum	TMCMB1A226MTR		1		
C523	CU3004	Chip C.	C1608CH1H030CT-AS		1		
C524	CU3027	Chip C.	C1608CH1H221JT-AS		1		
C525	CU3009	Chip C.	C1608CH1H080CT-A		1		
C526	CU3002	Chip C.	C1608CH1H010CT-AS		1		
C527	CU3009	Chip C.	C1608CH1H080CT-A		1		
C528	CU3003	Chip C.	C1608CH1H020CT-AS		1		
C529	CU3035	Chip C.	C1608JB1H102KT-AS		1		
C530	CU3035	Chip C.	C1608JB1H102KT-AS		1		
C531	CU3011	Chip C.	C1608CH1H100DT-AS		1		
CN501	UE0420	Connector	B8P-BC-2		1		
CN502	UE0185	Connector	B6P-BC-2		1		
D501	XD0131	Chip Diode	1SV214 TPH4		1		
D503	XD0300	Chip Diode	1SV262TPH2		1		
D504	XD0300	Chip Diode	1SV262TPH2		1		
IC501	XA0352	IC	M64076GP		1		
L501	QC0104	Chip Inductor	LER015T1R5M		1		
L503	QA0147	Chip Inductor	4VP-5.25T		1		
L504	QC0104	Chip Inductor	LER015T1R5M		1		

Ref.	Parte No.	Description	Parts Name		Qty		Ver
No.	raits NO.	Description	raits Naille	DR-135	DR-235	DR-435	VEI
L505	QC0104	Chip Inductor	LER015T1R5M		1		
L506	QC0544	Chip Inductor	LER015TR47M		1		
L507	QC0430	Chip Inductor	MLF1608DR10K-T		1		
Q501	XT0124	Chip Transistor	2SC4215-Y(TE85L)		1		
Q503	XE0010	FET	2SK508K52 T2B		1		
Q504	XT0124	Chip Transistor	2SC4215-Y(TE85L)		1		
R502	RK3022	Chip R.	MCR03EZHJ470		1		
R503	RK3030	Chip R.	MCR03EZHJ221		1		
R504	RK3001	Chip R.	MCR03EZHJ000		1		
R505	RK3048	Chip R.	MCR03EZHJ682		1		
R506	RK3052	Chip R.	MCR03EZHJ153		1		
R507	RK3042	Chip R.	MCR03EZHJ222		1		
R508	RK3026	Chip R.	MCR03EZHJ101		1		
R509	RK3034	Chip R.	MCR03EZHJ471		1		
R510	RK3054	Chip R.	MCR03EZHJ223		1		
R511	RK3044	Chip R.	MCR03EZHJ332		1		
R512	RK3022	Chip R.	MCR03EZHJ470		1		
R513	RK3050	Chip R.	MCR03EZHJ103		1		
R514	RK3060	Chip R.	MCR03EZHJ683		1		
R518	RK3025	Chip R.	MCR03EZHJ820		1		
R519	RK3022	Chip R.	MCR03EZHJ470		1		
R520	RK3045	Chip R.	MCR03EZHJ392		1		
R521	RK3026	Chip R.	MCR03EZHJ101		1		
R522	RK3034	Chip R.	MCR03EZHJ471		1		
R523	RK3050	Chip R.	MCR03EZHJ103		1		

### Main Unit (DR-435)

Ref.	Parts No.	Description	Parts Name		Qty		Ver
No.	raits No.	Description	raits Name	DR-135	DR-235	DR-435	Vei
C101	CU3047	Chip C.	C1608JB1H103KT-N			1	
C102	CU3047	Chip C.	C1608JB1H103KT-N			1	
C103	CS0049	Chip tantalum	TMCSA1C105MTR			1	
C104	CU3047	Chip C.	C1608JB1H103KT-N			1	
C105	CS0394	Chip tantalum	TMCMB0J476MTR			1	
C106	CU3051	Chip C.	C1608JB1E223KT-NS			1	
C107	CU3111	Chip C.	C1608JB1C104KT-N			1	
C108	CU3047	Chip C.	C1608JB1H103KT-N			1	
C109	CS0372	Chip tantalum	TMCMB1C106MTR			1	
C110	CU3035	Chip C.	C1608JB1H102KT-AS			1 1	
C111	CU3047	Chip C.	C1608JB1H103KT-N			1	
C112	CU3047	Chip C.	C1608JB1H103KT-N			l 1	
C113	CU3047	Chip C.	C1608JB1H103KT-N			l 1	
C114	CU3035	Chip C.	C1608JB1H102KT-AS			l 1	
C115	CE0350	Electrolytic C.	16MV 100HC			l 1	
C116	CU3047	Chip C.	C1608JB1H103KT-N			1 1	
C117	CU3035	Chip C.	C1608JB1H102KT-AS				
C118	CU3049	Chip C.	C1608JB1E153KT-NS			1	
C119	CU3051	Chip C.	C1608JB1E223KT-NS			1	
C120	CU3020	Chip C.	C1608CH1H560JT-AS			1	
C121	CU3035	Chip C.	C1608JB1H102KT-AS			I 1	
C122	CU3047	Chip C.	C1608JB1H103KT-N				
C123	CU3012	Chip C.	C1608CH1H120JT-AS				
C124	CU3040	Chip C.	C1608JB1H272KT-NS				
C125	CU3044	Chip C.	C1608JB1H562KT-NS				
C126	CU3038	Chip C.	C1608JB1H182KT-AS				
C127	CU3041	Chip C.	C1608JB1H332KT-NS				
C129	CU3008	Chip C.	C1608CH1H070CT-A				
C130	CS0220	Chip tantalum	TMCMA1C225MTR				
	CU3035	Chip tantalum Chip C.	C1608JB1H102KT-AS				
C131 C132	CU3035	Chip C.	C1608JB1H102KT-AS				
C132	CU3033	Chip C.	C1608CH1H221JT-AS				
C133	CU3042	Chip C.	C1608JB1H392KT-NS				
	CU3042		C1608JB1H562KT-NS				
C135		Chip C.	l				
C137 C138	CU3017 CS0049	Chip C.	C1608CH1H330JT-AS TMCSA1C105MTR				
		Chip tantalum	1			I 'I	
C139	CU3031	Chip C.	C1608JB1H471KT-AS			1 1	
C141	CU3008	Chip C.	C1608CH1H070CT-A			1	
C142	CU3111	Chip C.	C1608JB1C104KT-N			1 1	
C143	CU3111	Chip C.	C1608JB1C104KT-N			1 1	
C144	CU3015	Chip C.	C1608CH1H220JT-AS			1 1	
C145	CU3064	Chip C.	C1608CH1H1R5CT-AS			1 1	
C146	CE0339	Electrolytic C.	16MV 10SWB+TS			1	
C149	CU3035	Chip C.	C1608JB1H102KT-AS			1 1	
C150	CU3016	Chip C.	C1608CH1H270JT-AS			1 1	
C151	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C152	CE0339	Electrolytic C.	16MV 10SWB+TS			1	
C153	CU3003	Chip C.	C1608CH1H020CT-AS			1	
C154	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C155	CU3011	Chip C.	C1608CH1H100DT-AS			1	
C156	CU3047	Chip C.	C1608JB1H103KT-N			1	
C157	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C158	CU3004	Chip C.	C1608CH1H030CT-AS			1	
C159	CU3018	Chip C.	C1608CH1H390JT-AS			1	
C160	CU3016	Chip C.	C1608CH1H270JT-AS			1	
C161	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C162	CU3023	Chip C.	C1608CH1H101JT-AS			1	
C165	CU3111	Chip C.	C1608JB1C104KT-N	ı	I	l 1	

Ref.	Parts No.	Description	Parts Name	DR-135	Qty DR-235	DR-435	Ver	Ref.	Parts No.	Description	Parts Name	DR-135	Qty DR-235	DR-435	Ver
C167	CU3035	Chip C.	C1608JB1H102KT-AS			1		C286	CU3027	Chip C.	C1608CH1H221JT-AS			1	
C169	CU3035	Chip C.	C1608JB1H102KT-AS			1		C289	CS0049	Chip tantalum	TMCSA1C105MTR			1	
C170	CU3016	Chip C.	C1608CH1H270JT-AS			1		C291	CU3011	Chip C.	C1608CH1H100DT-AS			1 1	
C173	CU3035 CU3029	Chip C.	C1608JB1H102KT-AS			1		C292	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C174 C175	CU3029 CU3111	Chip C. Chip C.	C1608JB1H331KT-AS C1608JB1C104KT-N					C294 C297	CU3035 CU3035	Chip C. Chip C.	C1608JB1H102KT-AS C1608JB1H102KT-AS				
C176	CU3016	Chip C.	C1608CH1H270JT-AS					C298	CU3005	Chip C.	C1608CH1H040CT-AS				
C179	CU3111	Chip C.	C1608JB1C104KT-N			1		C305	CU3047	Chip C.	C1608JB1H103KT-N			1	
C180	CU3035	Chip C.	C1608JB1H102KT-AS			1		C306	CU3111	Chip C.	C1608JB1C104KT-N			1	
C181	CU3035	Chip C.	C1608JB1H102KT-AS			1		C307	CU3047	Chip C.	C1608JB1H103KT-N			1	
C182	CU3035	Chip C.	C1608JB1H102KT-AS			1		C308	CE0342	Electrolytic C.	16MV 470HC+TS			1	
C183	CU3035	Chip C.	C1608JB1H102KT-AS			1		C309	CU3051	Chip C.	C1608JB1E223KT-NS			1	
C184 C185	CU3035 CS0232	Chip C. Chip tantalum	C1608JB1H102KT-AS TMCMA1V474MTR					C310 C311	CU3023 CU3035	Chip C. Chip C.	C1608CH1H101JT-AS C1608JB1H102KT-AS			1	
C187	CU3035	Chip C.	C1608JB1H102KT-AS			¦		C312	CU3004	Chip C.	C16083B1H102K1-AS				
C188	CU3035	Chip C.	C1608JB1H102KT-AS					C314	CS0237	Chip tantalum	TMCMA1A475MTR				
C189	CU3015	Chip C.	C1608CH1H220JT-AS			1		C315	CS0237	Chip tantalum	TMCMA1A475MTR			1	
C190	CU3047	Chip C.	C1608JB1H103KT-N			1		C316	CS0237	Chip tantalum	TMCMA1A475MTR			1	
C191	CU3102	Chip C.	C1608JB1C333KT-NS			1		C317	CS0237	Chip tantalum	TMCMA1A475MTR			1	
C192	CU3047	Chip C.	C1608JB1H103KT-N			1		C318	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C193	CU3035	Chip C.	C1608JB1H102KT-AS			1		C319	CS0237	Chip tantalum	TMCMA1A475MTR			1	
C194	CU3004	Chip C.	C1608CH1H030CT-AS			1		C320	CE0100	Electrolytic C.	16MV 22UW			1	
C195 C196	CU3064 CU3011	Chip C. Chip C.	C1608CH1H1R5CT-AS C1608CH1H100DT-AS			1 1		C321 C322	CS0220 CU3035	Chip tantalum Chip C.	TMCMA1C225MTR C1608JB1H102KT-AS			1	
C197	CU4033	Chip C.	GRM42-6X7R102K500PT						UE0369	Connector	AXN49301616				
C198	CE0339	Electrolytic C.	16MV 10SWB+TS					CN102		Connector	10-5082-3110-17-100	l			
C199	CE0339	Electrolytic C.	16MV 10SWB+TS			1		- 1	UE0397	Connector	10-5082-3110-17-100	l		1	
C200	CU3035	Chip C.	C1608JB1H102KT-AS			1			UA0037Y	Wire	DC CABLE UA0037	l		1	
C201	CU4003	Chip C.	GRM42-6CK020C500PT			1			UE0394	Connector	PI28A15M	l		1	
C202	CU4011	Chip C.	GRM42-6CH100D500PT			1			UE0043	Connector	PI22A02M	l		1	
C203	CU4004	Chip C.	GRM42-6CJ030C500PT			1			UE0393	Connector	PI28A11M			1	
C204 C205	CU4003 CU3035	Chip C. Chip C.	GRM42-6CK020C500PT C1608JB1H102KT-AS			1			UE0369 UE0041	Connector Connector	AXN49301616 TMPJ01XV6	l		1	
C205	CE03035	Electrolytic C.	16MV 10SWB+TS						UE0341	Connector	PI28A02M				
C207	CU3002	Chip C.	C1608CH1H010CT-AS					D101	XD0141	Chip Diode	1SV237 TE85R				
C208	CU3002	Chip C.	C1608CH1H010CT-AS					D102	XD0254	Chip Diode	1SS355 TE17			1	
C209	CU3035	Chip C.	C1608JB1H102KT-AS			1		D103	XD0254	Chip Diode	1SS355 TE17			1	
C210	CU3003	Chip C.	C1608CH1H020CT-AS			1		D104	XD0254	Chip Diode	1SS355 TE17			1	
C211	CU3003	Chip C.	C1608CH1H020CT-AS			1		D105	XD0291	Chip Diode	MA729-TX			1	
C212	CE0364	Electrolytic C.	16MV 47SWB+TS			1		D106	XD0250	Chip Diode	MA742 TX			1	
C213	CU3035	Chip C.	C1608JB1H102KT-AS			1		D107	XD0141	Chip Diode	1SV237 TE85R			1	
C214 C215	CU3004 CU4008	Chip C. Chip C.	C1608CH1H030CT-AS GRM42-6CH070D500PT					D108 D109	XD0254 XD0301	Chip Diode Chip Diode	1SS355 TE17 1SV268-TD			1	
C216	CU4008	Chip C.	GRM42-6CH070D500FT GRM42-6CH100D500PT					D1103	XD00013	Diode	MI407				
C217	CU3051	Chip C.	C1608JB1E223KT-NS					D111	XD0250	Chip Diode	MA742 TX				
C218	CU3051	Chip C.	C1608JB1E223KT-NS			1		D112	XD0250	Chip Diode	MA742 TX			1	
C219	CU3035	Chip C.	C1608JB1H102KT-AS			1		D113	XD0254	Chip Diode	1SS355 TE17			1	
C220	CU3035	Chip C.	C1608JB1H102KT-AS			1		D114	XD0141	Chip Diode	1SV237 TE85R			1	
C221	CU3047	Chip C.	C1608JB1H103KT-N			1		D115	XD0254	Chip Diode	1SS355 TE17			1	
C222	CU3035	Chip C.	C1608JB1H102KT-AS			1		D116	XD0297	Chip Diode	MA8100-TX DA204U T106			1 1	
C223 C224	CE0364 CU3023	Electrolytic C. Chip C.	16MV 47SWB+TS C1608CH1H101JT-AS					D118 D119	XD0130 XD0254	Chip Diode Chip Diode	1SS355 TE17				
C225	CU3035	Chip C.	C1608JB1H102KT-AS			¦		D121	XD0234 XD0274	Diode	DSA3A1				
C226	CU3035	Chip C.	C1608JB1H102KT-AS			1			XD0131	Chip Diode	1SV214 TPH4			1	
	CS0049		TMCSA1C105MTR			1			XD0165	Chip Diode	UDZSTE-17 5.1B			1	
C228	CU3035	Chip C.	C1608JB1H102KT-AS			1		D128	XD0291	Chip Diode	MA729-TX			1	
C229	CU3101	Chip C.	C1608JB1C473KT-NS			1			XD0291	Chip Diode	MA729-TX			1	
	CU3035	Chip C.	C1608JB1H102KT-AS			1			XC0047	Ceramic Filter	ALFYM455E=K			1	
	CU3035 CU3035	Chip C.	C1608JB1H102KT-AS						XC0036	Ceramic Filter IC	ALFYM455G			1 1	
1	CU3033	Chip C. Chip C.	C1608JB1H102KT-AS C1608CH1H100DT-AS						XA0675 XA0348	ic	L88MS05TLL-TL TC4W53FU(TE12)				
C236	CU3035	Chip C.	C1608JB1H102KT-AS						XA0348	ic	TC4W53FU(TE12)	l			
	CU3035	Chip C.	C1608JB1H102KT-AS			1			XA0596	ic	NJM2902V-TE1	l			
C238	CS0049	Chip tantalum	TMCSA1C105MTR			1		IC108	XA0314	IC	TK10489MTL	l		1	
C239	CS0063	Chip tantalum	TMCSA1V104MTR			1			XA0115	IC	TC4S66F TE85R	l		1	
C240	CE0339	Electrolytic C.	16MV 10SWB+TS			1			XA0077A	IC	M57788M E	l		1	
	CU3022	Chip C.	C1608CH1H820JT-AS						XA0236	IC	BU4052BCF-E2	l		1 1	
	CU3051	Chip C.	C1608JB1E223KT-NS			1			XA0348	IC	TC4W53FU(TE12)	l		1	
1	CE0339 CE0339	Electrolytic C. Electrolytic C.	16MV 10SWB+TS 16MV 10SWB+TS						XA0068 XA0102	IC IC	M5218AFP/600E NJM7808FA	l		1 1	
	CS0049	Chip tantalum	TMCSA1C105MTR						XA0102 XA0410	IC IC	LA4425A	l			
	CU3043	Chip C.	C1608JB1H472KT-NS						UJ0046	Jack	MJ82-1	l		1	
	CU3111	Chip C.	C1608JB1C104KT-N			1			UJ0024Z	Jack	LGY6501-0600	l		1	
C248	CU3047	Chip C.	C1608JB1H103KT-N			1		L101	QC0043	Chip Inductor	NL322522T-2R2J-3	l		1	
1	CU3038	Chip C.	C1608JB1H182KT-AS			1		L102	QA0104	Coil	QA0104	l		1	
	CU3026	Chip C.	C1608CH1H181JT-AS			1		L103	QA0104	Coil	QA0104	l		1	
	CE0339	Electrolytic C.	16MV 10SWB+TS			1		L104	QC0057	Chip Inductor	NL322522T-015JA	l		1	
	CU3111 CU3111	Chip C. Chip C.	C1608JB1C104KT-N					L105 L106	QC0057 QC0055	Chip Inductor	NL322522T-015JA NL322522T-010JA	l		1 1	
	CE0364	Electrolytic C.	C1608JB1C104KT-N 16MV 47SWB+TS					L106	QC0055 QC0057	Chip Inductor Chip Inductor	NL322522T-010JA NL322522T-015JA	l		1 1	
	CU3111	Chip C.	C1608JB1C104KT-N					L107	QC0037 QC0124	Chip Inductor	NL322522T-015JA NL322522T-R15J-3	l		¦	
1	CE0339	Electrolytic C.	16MV 10SWB+TS					L109	QC0061	Chip Inductor	NL322522T-033JA	l		1	
	CU3035	Chip C.	C1608JB1H102KT-AS			1		L111	QKA25E	Coil	MR3.0 2.5T 0.8	l		1	
C261	CU3035	Chip C.	C1608JB1H102KT-AS			1		L112	QKA15D	Coil	MR3.0 1.5T 0.6	l		1	
1	CU3023	Chip C.	C1608CH1H101JT-AS			1		L113	QC0062	Chip Inductor	NL322522T-039JA	l		1	
	CU3047	Chip C.	C1608JB1H103KT-N			1		L114	QKA15E	Coil	MR3.0 1.5T 0.8	l		1	
	CE0343	Electrolytic C.	16MV 1000HC+T					L115	QKA15E	Coil	MR3.0 1.5T 0.8	l		1	
C278 C284	CU3035 CU3035	Chip C. Chip C.	C1608JB1H102KT-AS C1608JB1H102KT-AS					L116 L117	QKA15E QKA25D	Coil Coil	MR3.0 1.5T 0.8 MR3.0 2.5T 0.6	l		1 1	
<u>0284</u>	000000	JOHIP O.	C 100000 ITH 102KT-M3			ائے		E117	GIVAZUD	I COII	IMITO.0 2.01 0.0			اللل	

Ref.	Parts No.	Description	Parts Name		Qty DR-235 DR-435	Ver	Ref. No.	Parts No.	Description	Parts Name	Qty DR-135 DR-23		Ver
L118	QKA95D	Coil	MR3.0 9.5T 0.6		1		R153	RK3038	Chip R.	MCR03EZHJ102		1	
L119	QC0059	Chip Inductor	NL322522T-022JA		1 1		R154		Chip R.	MCR03EZHJ222		1 1	
L120	QC0059	Chip Inductor	NL322522T-022JA		1		R155		Chip R.	MCR03EZHJ153	1	1 1	
Q101 Q102	XU0131 XU0131	Chip Transistor Chip Transistor	DTC114EUA T106 DTC114EUA T106		1		R156 R157		Chip R. Chip R.	MCR03EZHJ471 MCR03EZHJ473		1 1	
ı	XU0151 XU0152	Chip Transistor	UMC5NTR		'		R157			MCR03EZHJ101	1		
Q104	XU0131	Chip Transistor	DTC114EUA T106				R160		Chip R.	MCR03EZHJ103		1 1	
Q105	XT0125	Chip Transistor	2SC4245-Y(TE85L)		1		R161		Chip R.	MCR03EZHJ471		1 1	
Q106	XE0013	Chip Transistor	3SK184 TX S		1 1		R162		Chip R.	MCR03EZHJ101		1	
Q107	XE0013	Chip Transistor	3SK184 TX S		1		R163	RK3026	Chip R.	MCR03EZHJ101		1	
Q108	XU0131	Chip Transistor	DTC114EUA T106		1		R164		Chip R.	ERJ6GEY0R00V	1	1 1	
Q110	XU0131	Chip Transistor	DTC114EUA T106		1		R165		Chip R.	MCR03EZHJ105		1 1	
Q111	XT0141	Chip Transistor	2SC4226-T1 R24		1		R168		Chip R.	MCR03EZHJ223		1 1	
	XT0141		2SC4226-T1 R24 UMC5NTR		1		R172			MCR03EZHJ333	1	1 1	
ı	XU0152 XU0131	Chip Transistor Chip Transistor	DTC114EUA T106		'		R173 R176		Chip R. Chip R.	MCR03EZHJ101 MCR03EZHJ332	1		
I	XT0084		2SC2954 T1		1		R180		Chip R.	MCR03EZHJ102			
Q116	XT0112	Transistor	2SB1292F		1 1		R181	RK3062	Chip R.	MCR03EZHJ104			
I	XT0095		2SC4081 T106R		1		R182		Chip R.	MCR03EZHJ222		1	
Q118	XT0094	Chip Transistor	2SA1576A T106R		1		R183	RK3060	Chip R.	MCR03EZHJ683		1 1	
Q119	XU0148	Chip Transistor	DTC144EUA T106		1		R184	RK3058	Chip R.	MCR03EZHJ473		1	
Q120	XU0131	Chip Transistor	DTC114EUA T106		1		R185		Chip R.	MCR03EZHJ474		1 1	
Q121	XU0178	Chip Transistor	XP1215-TX		1		R186		Chip R.	MCR03EZHJ104		1 1	
ı	XT0099	1 '	2SA1736 TE12R		1		R187			MCR03EZHJ473		1 1	
Q123	XT0061	Chip Transistor	2SB1132T 100Q		1		R188		Chip R.	MCR03EZHJ101		1 1	
Q124 Q125	XU0152 XT0048	Chip Transistor Chip Transistor	UMC5NTR 2SC3357RE T1		1		R189 R190		Chip R. Chip R.	MCR03EZHJ102 MCR03EZHJ102			
Q125	X10048 XU0131	Chip Transistor	DTC114EUA T106				R190		Chip R.	MCR03EZHJ102 MCR03EZHJ102			
Q127	XT0095	Chip Transistor	2SC4081 T106R		1		R192	1 1		MCR03EZHJ473			
Q128	XU0131	Chip Transistor	DTC114EUA T106		1		R193		Chip R.	MCR03EZHJ102		1 1	
Q129	XU0148	Chip Transistor	DTC144EUA T106		1		R195		Chip R.	MCR03EZHJ474		1 1	
Q130	XU0112	Chip Transistor	DTA114YUA T106		1		R196	RK3038	Chip R.	MCR03EZHJ102		1	
Q131	XT0141	Chip Transistor	2SC4226-T1 R24		1		R197		Chip R.	MCR03EZHJ103		1	
Q132	XU0131	Chip Transistor	DTC114EUA T106		1		R198		Chip R.	MCR03EZHJ222		1 1	
Q133	XU0131	Chip Transistor	DTC114EUA T106		1		R199		Chip R.	MCR03EZHJ222		1 1	
Q134	XT0095	Chip Transistor	2SC4081 T106R		1		R200		Chip R.	MCR03EZHJ474		1 1	
Q135	XT0095	Chip Transistor	2SC4081 T106R		1		R201		Chip R.	MCR03EZHJ222		1 1	
Q136	XU0148	Chip Transistor	DTC144EUA T106		1		R203		Chip R.	MCR03EZHJ333		1 1	
Q137 Q139	XU0131 XT0095	Chip Transistor Chip Transistor	DTC114EUA T106 2SC4081 T106R		'		R204 R206			MCR03EZHJ104 ERJ6GEYJ4R7V			
Q140	XT0095	Chip Transistor	2SC4081 T106R		'		R207		Chip R.	MCR03EZHJ153			
Q141	XU0148	Chip Transistor	DTC144EUA T106		1		R208		Chip R.	MCR03EZHJ471		1 1	
Q142	XU0148	Chip Transistor	DTC144EUA T106		1 1		R209		Chip R.	MCR03EZHJ823		1 1	
R101	RK3050	Chip R.	MCR03EZHJ103		1		R210			MCR03EZHJ221		1 1	
R102	RK3091	Chip R.	MCR03EZPFX3902		1		R211	RK4018	Chip R.	ERJ12YJ220U		1	
R103	RK3091	Chip R.	MCR03EZPFX3902		1		R212		Chip R.	ERJ12YJ101U		1 1	
R104	RK3050	Chip R.	MCR03EZHJ103		1		R213		Chip R.	MCR03EZHJ822		1 1	
R105	RK3028	Chip R.	MCR03EZHJ151		1		R214		Chip R.	MCR03EZHJ103		1 1	
R106 R107	RK3026 RK3026	Chip R. Chip R.	MCR03EZHJ101 MCR03EZHJ101				R215 R216		Chip R. Chip R.	MCR03EZHJ681 MCR03EZHJ222			
R109	RK3026	Chip R.	MCR03EZHJ101		1		R217		Chip R.	MCR03EZHJ222		1 1	
R110	RK3068	Chip R.	MCR03EZHJ334		1		R218		Chip R.	MCR03EZHJ683		1 1	
ı	RK3044	Chip R.	MCR03EZHJ332		1		R219		Chip R.	MCR03EZHJ222		1 1	
R112	RK3022	Chip R.	MCR03EZHJ470		1		R220	RK4034	Chip R.	ERJ12YJ471U		1	
R113	RK3022	Chip R.	MCR03EZHJ470		1		R221	RK3051	Chip R.	MCR03EZHJ123		1	
	RK3042	Chip R.	MCR03EZHJ222		1		R222		Chip R.	MCR03EZHJ103		1 1	
	RK3041	Chip R.	MCR03EZHJ182		1 1		R223		Chip R.	MCR03EZHJ101		1 1	
	RK3030	Chip R.	MCR03EZHJ221		1		R224		Chip R.	MCR03EZHJ220		1 1	
	RK3070	Chip R.	MCR03EZHJ474		1		R226			MCR03EZHJ102 MCR03EZHJ471		1 1	
	RK3026 RK3052	Chip R. Chip R.	MCR03EZHJ101 MCR03EZHJ153				R227 R228		Chip R. Chip R.	MCR03EZHJ471 MCR03EZHJ223			
ı	RK3045	Chip R.	MCR03EZHJ392				R229		Chip R.	MCR03EZHJ392			
	RK3063	Chip R.	MCR03EZHJ124		i		R230		Chip R.	MCR03EZHJ103		1	
	RK3059	Chip R.	MCR03EZHJ563		1		R231			MCR03EZHJ470		1 1	
	RK3061	Chip R.	MCR03EZHJ823		1		R234		Chip R.	MCR03EZHJ223		1	
ı	RK3057	Chip R.	MCR03EZHJ393		1		R235		Chip R.	MCR03EZHJ103		1	
ı	RK3036	Chip R.	MCR03EZHJ681		1		R236		Chip R.	MCR03EZHJ103		1 1	
	RK3049	Chip R.	MCR03EZHJ822		1		R237		Chip R.	MCR03EZHJ101		1	
	RK3062	Chip R.	MCR03EZHJ104		1		R238			MCR03EZHJ104		1	
	RK0069 RK3054	Chip R. Chip R.	ERJ6GEYJ104V MCR03EZHJ223		1		R239 R240		Chip R.	MCR03EZHJ103 MCR03EZHJ102		1	
	RK3054 RK3050	Chip R.	MCR03EZHJ223 MCR03EZHJ103		1		R240 R241		Chip R. Chip R.	MCR03EZHJ102 MCR03EZHJ123			
	RK3030	Chip R.	MCR03EZHJ331				R241		Chip R.	MCR03EZHJ102			
	RK3054		MCR03EZHJ223		1		R243			MCR03EZHJ223			
	RK3056	Chip R.	MCR03EZHJ333		i		R244		Chip R.	MCR03EZHJ334		1	
	RK3050	Chip R.	MCR03EZHJ103		1		R245		Chip R.	MCR03EZHJ102		1	
R137	RK3067	Chip R.	MCR03EZHJ274		1		R246		Chip R.	MCR03EZHJ472		1 1	
	RK3059	Chip R.	MCR03EZHJ563		1		R247		Chip R.	MCR03EZHJ103		1	
	RK3050	Chip R.	MCR03EZHJ103		1		R248			MCR03EZHJ474		1	
	RK3072	Chip R.	MCR03EZHJ684		1		R249		Chip R.	MCR03EZHJ332		1	
ı	RK3064	Chip R.	MCR03EZHJ154		1		R250		Chip R.	MCR03EZHJ474		1	
	RK3055	Chip R.	MCR03EZHJ273		1		R251		Chip R.	MCR03EZHJ103		] ]	
	RK3038	Chip R.	MCR03EZHJ102 MCR03EZHJ222		1		R252 R253		Chip R.	MCR03EZHJ474 MCR03EZHJ393		1	
	RK3042 RK3050	Chip R. Chip R.	MCR03EZHJ222 MCR03EZHJ103		1		R253		Chip R. Chip R.	MCR03EZHJ393 MCR03EZHJ393			
	RK3050	Chip R.	MCR03EZHJ103				R255		Chip R.	MCR03EZHJ472			
(K148		1 '		i 1	1 4	1	R256		Chip R.	MCR03EZHJ101	1	1 1	
	RK3058	Chip R.	MCR03EZHJ473	!			11230						
R150	RK3058 RK3050	Chip R. Chip R.	MCR03EZHJ473 MCR03EZHJ103				R257		Chip R.	MCR03EZHJ472		1	l

Ref.	Parts No.	Description	Parts Name		Qty		Ve
No.				DR-135	DR-235		
R259	RK3050	Chip R.	MCR03EZHJ103			1	
R260 R261	RK3054	Chip R.	MCR03EZHJ223			1	
R262	RK3054 RK3069	Chip R.	MCR03EZHJ223 MCR03EZHJ394			1	
R263	RK3059	Chip R. Chip R.	MCR03EZHJ123			1	
R264	RK3038	Chip R.	MCR03EZHJ102			1	
R265	RK3062	Chip R.	MCR03EZHJ104			1	
R266	RK3050	Chip R.	MCR03EZHJ103			1	
R268	RK3050	Chip R.	MCR03EZHJ103			1	
R269	RK3074	Chip R.	MCR03EZHJ105			1	
R271	RK4034	Chip R.	ERJ12YJ471U			1	
R272	RK3050	Chip R.	MCR03EZHJ103			1	
R273	RK3050	Chip R.	MCR03EZHJ103			1	
R274	RK3050	Chip R.	MCR03EZHJ103			1	
R277	RK3042	Chip R.	MCR03EZHJ222			1	
R279	RK3046	Chip R.	MCR03EZHJ472			1	
R280	RK1028	Chip R.	ERJ8GEYJ471V			1	
R281	RK3041	Chip R.	MCR03EZHJ182			1	
R282	RK3018	Chip R.	MCR03EZHJ220			1	
R283	RK3038	Chip R.	MCR03EZHJ102			1	
R287	RK3046	Chip R.	MCR03EZHJ472			1	
R291	RK3026	Chip R.	MCR03EZHJ101			1	
R293	RK3050	Chip R.	MCR03EZHJ103			1	
R295	RK3038	Chip R.	MCR03EZHJ102			1	
R296	RK3058	Chip R.	MCR03EZHJ473			1	
R297	RK3050	Chip R.	MCR03EZHJ103			1	
R303	RK3049 RK3049	Chip R.	MCR03EZHJ822 MCR03EZHJ822			1 1	
R304 R305	RK3049 RK3042	Chip R.	MCR03EZHJ222			1	
R306	RK3076	Chip R. Chip R.	MCR03EZHJ222 MCR03EZHJ155			1	
R308	RK3076	Chip R.	MCR03EZHJ155			1	
R309	RK3050	Chip R.	MCR03EZHJ103			1	
R310	RK3042	Chip R.	MCR03EZHJ222			1	
R315	RK3042	Chip R.	MCR03EZHJ222			1	
R316	RK3051	Chip R.	MCR03EZHJ123			1	
R318	RK3050	Chip R.	MCR03EZHJ103			1	
R319	RK3062	Chip R.	MCR03EZHJ104			1	
R320	RK3062	Chip R.	MCR03EZHJ104			1	
R322	RD0108	Jumper	J1/6Z			1	
R324	RK3014	Chip R.	MCR03EZHJ100			1	
R325	RK3066	Chip R.	MCR03EZHJ224			1	
R326	RK3038	Chip R.	MCR03EZHJ102			1	
R327	RK3092	Chip R.	MCR03EZPFX7502			1	
R328	RD3013	Resistor	ERX1SJ100			1	
R329	RK3062	Chip R.	MCR03EZHJ104			1	
R330	RK3062	Chip R.	MCR03EZHJ104			1	
R331	RK3038	Chip R.	MCR03EZHJ102			1	
R332	RK3054	Chip R.	MCR03EZHJ223			1	
R333	RK3062	Chip R.	MCR03EZHJ104			1	
R334	RK3042	Chip R.	MCR03EZHJ222			1	
SH101	TS0164A	Case	VCO CASE DR235			1	
TC101	CT0012	Trimmer C.	CTZ3S-10A-W1-P			1	
TC102	CT0012 CT0012	Trimmer C.	CTZ3S-10A-W1-P CTZ3S-10A-W1-P			1 1	
		Trimmer C. Thermistor	I			1	
	XS0031 XS0030	Thermistor	NTCCM16084BH682KCT NTCCM16084LH223KCT			1	
	RH0146	Trimmer R.	MVR22HXBRN473			1	
	RH0148	Trimmer R.	MVR22HXBRN104			1	
	RH0142	Trimmer R.	MVR22HXBRN103			1	
	RH0142	Trimmer R.	MVR22HXBRN103			1	
	RH0142	Trimmer R.	MVR22HXBRN103			1	
	RH0146	Trimmer R.	MVR22HXBRN473			1	
	RH0140	Trimmer R.	MVR22HXBRN472			1	
	XK0002	Discriminator	CDBM455C7			1	
	XQ0112	Xtal	UM-5 21.250MHZ			1	
X104	XQ0058Z	Xtal	UM5 30.395MHZ			1	
	XF0014Z	Xtal Filter	30M152A 30.85MHZ			1	
	TZ0072		SHEET			1	
	UP0415	P.C.B	DR435 INTEGRATED			1	
	SD0034		GND SPRING DR130			1	
	TZ0049		SILICON DUMPER			2	

### VCO Unit (DR-435)

Ref.	Parte No.	Description	Parts Name		Qty		Ver
No.	raits NO.	Description	raits ivaille	DR-135	DR-235	DR-435	VEI
C501	CU3047	Chip C.	C1608JB1H103KT-N			1	
C502	CU3023	Chip C.	C1608CH1H101JT-AS			1	
C503	CU3047	Chip C.	C1608JB1H103KT-N			1	
C504	CU3023	Chip C.	C1608CH1H101JT-AS			1	
C505	CU3023	Chip C.	C1608CH1H101JT-AS			1	
C506	CU3031	Chip C.	C1608JB1H471KT-AS			1	
C507	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C508	CU3102	Chip C.	C1608JB1C333KT-NS			1	
C509	CS0220	Chip tantalum	TMCMA1C225MTR			1	
C510	CS0220	Chip tantalum	TMCMA1C225MTR			1	
C511	CU3006	Chip C.	C1608CH1H050CT-AS			1	
C512	CU3035	Chip C.	C1608JB1H102KT-AS	l		1	

Ref.	L	I		Qty			
No.	Parts No.	Description	Parts Name	DR-135	DR-235	DR-435	Ver
C513	CS0063	Chip tantalum	TMCSA1V104MTR			1	
C514	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C515	CU3003	Chip C.	C1608CH1H020CT-AS			1	
C516	CU3019	Chip C.	C1608CH1H470JT-AS			1	
C517	CU3006	Chip C.	C1608CH1H050CT-AS			1	
C518	CU3004	Chip C.	C1608CH1H030CT-AS			1	
C519	CU3002	Chip C.	C1608CH1H010CT-AS			1	
C520	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C521	CU3003	Chip C.	C1608CH1H020CT-AS			1	
C522	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C523	CS0372	Chip tantalum	TMCMB1C106MTR			1	
C524	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C525	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C526	CU3011	Chip C.	C1608CH1H100DT-AS			1	
C527	CU3011	Chip C.	C1608CH1H100DT-AS			1	
C528	CU3035	Chip C.	C1608JB1H102KT-AS			1	
C529	CU3006	Chip C.	C1608CH1H050CT-AS			1	
CN501	UE0368	Connector	AXN39301613			1	
D501	XD0131	Chip Diode	1SV214 TPH4			1	
D502	XD0131	Chip Diode	1SV214 TPH4			1	
D503	XD0131	Chip Diode	1SV214 TPH4			1	
IC501	XA0352	IC .	M64076GP			1	
L501	QC0101	Chip Inductor	LER015TR82M			1	
L503	QA0093	Chip Inductor	QA0093			1	
L504	QC0101	Chip Inductor	LER015TR82M			1	
L505	QC0096	Chip Inductor	LER015TR33M			1	
L506	QC0430	Chip Inductor	MLF1608DR10K-T			1	
L507	QC0430	Chip Inductor	MLF1608DR10K-T			1	
Q501	XT0124	Chip Transistor	2SC4215-Y(TE85L)			1	
Q502	XE0010	Chip FET	2SK508K52 T2B			1	
Q503	XT0125	Chip Transistor	2SC4245-Y(TE85L)			1	
Q504	XT0125	Chip Transistor	2SC4245-Y(TE85L)			1	
R501	RK3030	Chip R.	MCR03EZHJ221			1	
R502	RK3022	Chip R.	MCR03EZHJ470			1	
R503	RK3038	Chip R.	MCR03EZHJ102			1	
R504	RK3038	Chip R.	MCR03EZHJ102			1	
R505	RK3038	Chip R.	MCR03EZHJ102			1	
R506	RK3001	Chip R.	MCR03EZHJ000			1	
R507	RK3047	Chip R.	MCR03EZHJ562			1	
R508	RK3050	Chip R.	MCR03EZHJ103			1	
R509	RK3038	Chip R.	MCR03EZHJ102			1	
R510	RK3026	Chip R.	MCR03EZHJ101			1	
R511	RK3034	Chip R.	MCR03EZHJ471			1	
R512	RK3054	Chip R.	MCR03EZHJ223			1	
R513	RK3043	Chip R.	MCR03EZHJ272			1	
R514	RK3060	Chip R.	MCR03EZHJ683			1	
R515	RK3058	Chip R.	MCR03EZHJ473			1	
R516	RK3022	Chip R.	MCR03EZHJ470			1	
R517	RK3060	Chip R.	MCR03EZHJ683			1	
R518	RK3022	Chip R.	MCR03EZHJ470			1	
R519	RK3022	Chip R.	MCR03EZHJ470			1	
R520	RK3050	Chip R.	MCR03EZHJ103			1	
R521	RK3045	Chip R.	MCR03EZHJ392			1	
R522	RK3030	Chip R.	MCR03EZHJ221			1	
R523	RK3030	Chip R.	MCR03EZHJ221			1	
R524	RK3050	Chip R.	MCR03EZHJ103			1	
R525	RK3042	Chip R.	MCR03EZHJ222			1	
R526	RK3044	Chip R.	MCR03EZHJ332			1	
R527	RK3038	Chip R.	MCR03EZHJ102			1	
	-		-				

### **Mechanical Parts**

Ref.	Parte No.	Description	Parts Name		Qty		Ver
No.	raits No.	Description	Faits Name	DR-135	DR-235	DR-435	VEI
CN7	UE0401	Dsub Connector	K-D-09S-SE	1	1	1	
CN6	UX1251	Wire	WIRE DSUB	1	1	1	
	ES0017	Speaker	057M9017	1	1	1	
	UX1047	Wire	Speaker	1	1	1	
	AA0050	Screw	M2.6+6 FE/B.Zn	6	6	6	
	AE0029	Screw	RDG-LNA-W1(01)	2	2	2	
	AV0006	Screw	B2.6+8 Fe/Ni	16	16	16	
	AVV0001	Screw	3+8 Fe/Ni	2	2	2	
	AZ0042	Washer		2	2	2	
	DP0127	LCD PANEL	DR135	1	-	-	
	DP0135	LCD PANEL	DR235	-	1	-	
	DP0136	LCD PANEL	DR435	-	-	1	
	FF0015	Cloth	BLIND CLOTH DR110	2	2	2	
	FF0017	Cloth	BLIND CLOTH DR570	1	1	1	
	FG0273	Rubber	ON AIR KEY RUBBER	1	1	1	
	FG0320	SP Cushion		1	1	1	
	KS0068	Bottom Case	DR135	1	1	1	T,E
	KS0070	Bottom Case	G DR135	1	1	1	TG,EG
	KZ0105	Front Panel	DR135	1	1	1	T,E
	KZ0120	Front Panel	G DR135	1	1	1	TG,EG
	NK0072	Knob	VOL DR135	1	1	1	
	NK0073	Knob	DIAL DR135	1	1	1	
	SS0093	Chassis	DR135	1	1	1	T,E
	SS0095	Chassis	G DR135	1	1	1	TG,EG

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Ref.	Darte No.	Description	Parts Name		Qty		Ver
No.	Faits NO.	Description	Faits Name	DR-135	DR-235	DR-435	V CI
	ST0065	SP Holder	DR135	1	1	1	
	ST0066	SP FITTING	DR135	1	1	1	
l	TG0034	SP Himelon	DR135	1	1	1	
	UE0258	ANT Connector	FM-M.D.R-(4)	1	1	1	
	YZ0131	Таре	#9110 12X1mm	60	60	60	
	DS0388A		Model Name Plate	1	-	1	E,EG
l	DS0429		Model Name Plate	1	1	1	T,TG
l	PR0309	Label	CE-MARKLABEL DJG5E	2.2	-	2.2	E,EG
l	PR0451	Label	FCC Part 15 Seal	1	1	1	T,TG
	PR0452	Label	FCC Home Use Seal	1	1	1	T,TG

### Packing Parts

Ref.	Darte No.	Description	Parts Name Qty			Ver	
No.	Faits NO.	Description	Faits Name	DR-135	DR-235	DR-435	VEI
	HK0486	Package	Item Carton DR135	1		-	
	HK0507	Package	Item Carton DR235T	-	1	-	T,TG
	HK0508	Package	Item Carton DR435T	-	-	1	
	HM0203	Carton Box	5PCS	0.2	0.2	0.2	
	HU0099	P.MTL/Carton	FRONT DR605	1	1	1	
	HU0159	P.MTL/Carton	Fixture	1	1	1	
	HU0161	P.MTL/Carton	Fixture 5PCS	0.4	0.4	0.4	
	PR0345	Label	Т	3	3	3	T,TG
1	PT0004A	Label	SERIAL NO.FOR CARTON	2	2	2	

### **ACCESSORIES**

Ref.	Darte No.	Description	Parts Name		Qty		Ver
No.	raits No.	Description	Faits Name	DR-135	DR-235	DR-435	VEI
	ADFM78	Bracket	DR130	1	1	1	
	ADUA38	Power cable	R-B2.0X3M RECEPT.15A	1	1	1	
	EMS53	Microphone		1	1	1	E,EG
	EMS56	Microphone		1	-	-	
	EMS57	Microphone	Remote control	-	1	1	T,TG
	HP0009	Plastic bag	5X125X250(ADUA38)	1	1	1	
	HP0035	Plastic bag	5X200X250(DR135)	1	1	1	
	PH0009A		Registration Card	1	1	1	T,TG
	PK0078		Schematic Diagram DR135	1	-	-	
	PK0083		Schematic Diagram DR235	-	1	-	T,TG
	PK0085		Schematic Diagram DR435	-	-	1	
	PR0454	Label	Security Seal T	2	2	2	
1	PS0370	Manual	INSTRUCTION DR235T	1	1	1	
1	UX1259	Wire	SCR1	1	1	1	
1	UX1260	Wire	SCR2	1	1	1	

### **ACCESSORIES (SCREW SET)**

Ref.	Parts No.	Description	Parts Name	DR-135	Qty	DD 436	Ver
NO.		_		DK-135	DR-235	DR-435	
1	AA0013	Screw	M5+20 Fe/Zn	4	4	4	
	AE0012	Screw	HEXH/D M4+8 Fe/B.Zn	4	4	4	
1	AJ0003	Screw	T5+20 Fe/Zn	4	4	4	
1	AJ0003	Nut	N5x0.8 Fe/Zn	4	4	4	
1	AZ0009	Washer	5x9.2x1.3 Fe/Zn	4	4	4	
1	AZ0010	Washer	5x12x0.8 Fe/Zn	4	4	4	
1	EF0005	Fuse	FGBO 125V 15A	2	2	2	
1	FM0079Z	SPANNER	DR130	1	1	1	
1	HP0006	Plastic bag	5X90X170	1	1	1	
	YZ0121	Таре	Tape 10mm	2	2	2	

### TNC (EJ41U)

Ref.No.	Parts No.	Description	Parts Name	Qty
BAT1	ED0006	Battery	BR2032 1F2	1
C1	CS0408	Chip Tantal	6MCM156MATER	1
C2	CS0408	Chip Tantal	6MCM156MATER	1
C3 C4	CU3035 CU3111	Chip C.	C1608JB1H102KT-AS C1608JB1C104KT-N	1
C5	CU9018	Chip C. Chip C.	C3216JB1C105MT-N	
C6	CU3047	Chip C.	C1608JB1H103KT-N	1
C7	CU3047	Chip C.	C1608JB1H103KT-N	1
C8	CU3111	Chip C.	C1608JB1C104KT-N	1
C9	CU3051	Chip C.	C1608JB1E223KT-NS	1
C10	CU3111	Chip C.	C1608JB1C104KT-N	1
C11	CU3111	Chip C.	C1608JB1C104KT-N	1
C12 C13	CU9018	Chip C.	C3216JB1C105MT-N C1608JB1E223KT-NS	1
C13	CU3051 CU3116	Chip C. Chip C.	C1608JB1E223K1-NS C1608CH1H471JT-AS	1
C15	CU3051	Chip C.	C1608JB1E223KT-NS	1
C16	CU3051	Chip C.	C1608JB1E223KT-NS	1
C17	CU3045	Chip C.	C1608JB1H682KT-NS	1
C18	CU3045	Chip C.	C1608JB1H682KT-NS	1
C19	CU3047	Chip C.	C1608JB1H103KT-N	1
C20	CU9018	Chip C.	C3216JB1C105MT-N	1
C21	CU3111	Chip C.	C1608JB1C104KT-N	1
C22	CU3035	Chip C.	C1608JB1H102KT-AS	1
C23 C24	CU3111 CU3004	Chip C. Chip C.	C1608JB1C104KT-N C1608CH1H030CT-AS	1
C24 C25	CU3004 CU3047	Chip C.	C1608JB1H103KT-N	1
C26	CU3027	Chip C.	C1608CH1H221JT-AS	1
C27	CU3023	Chip C.	C1608CH1H101JT-AS	1
C28	CU3111	Chip C.	C1608JB1C104KT-N	1
C29	CU3111	Chip C.	C1608JB1C104KT-N	1
C30	CU3111	Chip C.	C1608JB1C104KT-N	1
C31	CU3062	Chip C.	C1608CH1H160JT-A	1
C32	CU3111	Chip C.	C1608JB1C104KT-N	1
C33	CS0049	Chip Tantal	TMCSA1C105MTR	1
C34	CS0394 CU3111	Chip Tantal	TMCMB0J476MTR	1
C35 C36	CU3019	Chip C. Chip C.	C1608JB1C104KT-N C1608CH1H470JT-AS	1
C37	CU3043	Chip C.	C1608JB1H472KT-NS	1
C38	CU3111	Chip C.	C1608JB1C104KT-N	1
C39	CU3047	Chip C.	C1608JB1H103KT-N	1
C40	CU3045	Chip C.	C1608JB1H682KT-NS	1
C41	CU3116	Chip C.	C1608CH1H471JT-AS	1
C42	CU9018	Chip C.	C3216JB1C105MT-N	1
C43	CU3039	Chip C.	C1608JB1H222KT-AS	1
C44	CU3051	Chip C.	C1608JB1E223KT-NS	1
C45	CU3045	Chip C.	C1608JB1H682KT-NS	1
C46 C48	CU3039 CU3111	Chip C. Chip C.	C1608JB1H222KT-AS C1608JB1C104KT-N	1
CN1	UE0402	Connector	PI28B11M	
D1	XL0036	LED	SML-310MTT86	
D2	XL0035	LED	SML-310UTT86	1
D3	XL0036	LED	SML-310MTT86	1
D4	XL0036	LED	SML-310MTT86	1
D5	XD0291	Diode	MA729-TX	1
D6	XD0291	Diode	MA729-TX	1
IC1	XA0678	IC	TGT0210Q	1
IC2	XA0463	IC	TA75S393F(TE85L)	1
IC3	XA0679	IC	TMT0110Q	1
IC4 IC5	XA0224 XA0326	IC IC	NJM2904M T1 NJM2903(T1)	1
IC6	XA0680	IC IC	ADM232AARN-REEL	
IC7	XA0668	ic ic	S-80829ALNP-EAS-T2	
L2	QB0044	Chip Coil	BK1608HM601-T	1
Q1	XT0095	Transister	2SC4081 T106R	1
Q2	XT0094	Transister	2SA1576A T106R	1
Q3	XT0094	Transister	2SA1576A T106R	1
Q4	XT0094	Transister	2SA1576A T106R	1
Q5	XE0029	FET	2SK1580-T1	1
Q6 Q7	XT0095	Transister	2SC4081 T106R	1
Q7 Q8	XU0078 XT0095	Transister Transister	UN521L-TX 2SC4081 T106R	1
Q9	XT0095 XT0094	Transister	2SA1576A T106R	1
Q10	XT0094 XT0095	Transister	2SC4081 T106R	1
Q11	XT0095	Transister	2SC4081 T106R	1
R1	RK3062	Chip R.	MCR03EZHJ104	1
R2	RK3062	Chip R.	MCR03EZHJ104	1
R3	RK3062	Chip R.	MCR03EZHJ104	1
R4	RK3062	Chip R.	MCR03EZHJ104	1
R5	RK3034	Chip R.	MCR03EZHJ471	1
R6	RK3034	Chip R.	MCR03EZHJ471	1
R7	RK3034	Chip R.	MCR03EZHJ471	1
R8	RK3032	Chip R.	MCR03EZHJ331	1
R9 R10	RK3038 RK3050	Chip R. Chip R.	MCR03EZHJ102 MCR03EZHJ103	1
R11	RK3066	Chip R.	MCR03EZHJ224	
R12	RK3038	Chip R.	MCR03EZHJ102	1
		,		

R13 Rx3038	Ref.No.	Parts No.	Description	Parts Name	Qty
R14 Rx3038 Chip R. MCR03EZHJ102 R15 Rx3038 Chip R. MCR03EZHJ102 R17 Rx3050 Chip R. MCR03EZHJ102 R17 Rx3050 Chip R. MCR03EZHJ103 R18 Rx3050 Chip R. MCR03EZHJ102 R19 Rx3038 Chip R. MCR03EZHJ102 R19 Rx3050 Chip R. MCR03EZHJ102 R19 Rx3050 Chip R. MCR03EZHJ102 R19 Rx3050 Chip R. MCR03EZHJ103 R19 Rx3050 Chip R. MCR03EZHJ10	R13				1
R16 Rx3038	R14	RK3038		MCR03EZHJ102	1
R17 RK3050	R15				1
R18			l '		1
R19 Rx3038 Chip R MCR03EZHJ102 R20 Rx3054 Chip R MCR03EZHJ102 R21 Rx3053 Chip R MCR03EZHJ103 R22 Rx3054 Chip R MCR03EZHJ103 R23 Rx3050 Chip R MCR03EZHJ103 R24 Rx3051 Chip R MCR03EZHJ103 R25 Rx3050 Chip R MCR03EZHJ103 R26 Rx3050 Chip R MCR03EZHJ103 R27 Rx3050 Chip R MCR03EZHJ103 R27 Rx3050 Chip R MCR03EZHJ103 R28 Rx3044 Chip R MCR03EZHJ103 R29 Rx3050 Chip R MCR03EZHJ103 R30 Rx3044 Chip R MCR03EZHJ103 R30 Rx3044 Chip R MCR03EZHJ103 R30 Rx3044 Chip R MCR03EZHJ103 R31 Rx3050 Chip R MCR03EZHJ103 R32 Rx3050 Chip R MCR03EZHJ103 R33 Rx3050 Chip R MCR03EZHJ103 R34 Rx3051 Chip R MCR03EZHJ103 R35 Rx3051 Chip R MCR03EZHJ103 R36 Rx3054 Chip R MCR03EZHJ103 R37 Rx3051 Chip R MCR03EZHJ103 R38 Rx3050 Chip R MCR03EZHJ103 R39 Rx3050 Chip R MCR03EZHJ103 R39 Rx3050 Chip R MCR03EZHJ103 R39 Rx3050 Chip R MCR03EZHJ103 R41 Rx3054 Chip R MCR03EZHJ103 R42 Rx4041 Chip R MCR03EZHJ103 R44 Rx3001 Chip R MCR03EZHJ103 R44 Rx3001 Chip R MCR03EZHJ103 R46 Rx3004 Chip R MCR03EZHJ103 R47 Rx3050 Chip R MCR03EZHJ103 R48 Rx3001 Chip R MCR03EZHJ103 R48 Rx3001 Chip R MCR03EZHJ103 R40 Rx3051 Chip R MCR03EZHJ103 R41 Rx3050 Chip R MCR03EZHJ103 R42 Rx4044 Chip R MCR03EZHJ103 R44 Rx3001 Chip R MCR03EZHJ103 R45 Rx3000 Chip R MCR03EZHJ103 R46 Rx3001 Chip R MCR03EZHJ103 R47 Rx3050 Chip R MCR03EZHJ103 R48 Rx3001 Chip R MCR03EZHJ103 R49 Rx3046 Chip R MCR03EZHJ103 R49 Rx3046 Chip R MCR03EZHJ103 R49 Rx3046 Chip R MCR03EZHJ103 R48 Rx3000 Chip R MCR03EZHJ103 R56 Rx3060 Chip R MCR03EZHJ103 R67 Rx3060 Chip R MCR03EZHJ103 R68 Rx3060 Chip R MCR03EZHJ103 R69 Rx3000 Chip R MCR03EZHJ103 R60 Rx3044 Chip R MCR03EZHJ103 R61 Rx3000 Chip R MCR03EZHJ103 R62 Rx3000 Chip R MCR03EZHJ103 R63 Rx3000 Chip R MCR03EZHJ103 R64 Rx3000 Chip R MCR03EZHJ103 R67 Rx3000 Chip R MCR03EZHJ103 R68 Rx3000 Chip R MCR03EZHJ103 R68 Rx3000 Chip R MCR03EZHJ103 R70 Rx3000 Chip R MCR03EZHJ103 R71 Rx3000 Chip R MCR03EZHJ103 R72 Rx3000 Chip R MCR03EZHJ103 R73 Rx3000 Chip R MCR03EZHJ103			l '		1
R20 Rx3038					1
R21 RK3053 Chip R MCR03EZHJ183 R22 RK3054 Chip R MCR03EZHJ103 R24 RK3071 Chip R MCR03EZHJ103 R25 RX5050 Chip R MCR03EZHJ103 R25 RX5050 Chip R MCR03EZHJ103 R25 RX5050 Chip R MCR03EZHJ103 R27 RX5050 Chip R MCR03EZHJ103 R27 RX5050 Chip R MCR03EZHJ103 R28 RX5048 Chip R MCR03EZHJ103 R28 RX5044 Chip R MCR03EZHJ103 R28 RX5044 Chip R MCR03EZHJ103 R28 RX5050 Chip R MCR03EZHJ103 R28 RX5050 Chip R MCR03EZHJ103 R25 R25 RX5050 Chip R MCR03EZHJ000 R25 R25 R25 RX5050 Chip R MCR03EZHJ000 R25 R25 R25 RX5050 Chip R MCR03EZHJ000 R25 R25 RX5050 Chip R MCR03EZHJ000 R25 R25 RX5050 Chip R MCR03EZHJ103 R25 R25 RX5050 Chip R MCR03EZHJ103 R25 R25 RX5050 Chip R MCR03EZHJ103 R25 RX5050 Chip R MCR03EZHJ103 R25 R25 RX5050 Chip R MCR03EZHJ103 R25 RX5050 Chip R MCR03EZHJ103 R25 R25 RX5050 Chip R MC			l '		1
R22 RK3056 Chip R MCR03EZHJ103 R24 RK3050 Chip R MCR03EZHJ103 R25 RK3050 Chip R MCR03EZHJ103 R26 RK3050 Chip R MCR03EZHJ103 R27 RK3050 Chip R MCR03EZHJ103 R27 RK3050 Chip R MCR03EZHJ103 R28 RK3045 Chip R MCR03EZHJ103 R28 RK3044 Chip R MCR03EZHJ332 R29 RK3050 Chip R MCR03EZHJ332 R30 RK3044 Chip R MCR03EZHJ332 R31 RK3050 Chip R MCR03EZHJ332 R32 RK3042 Chip R MCR03EZHJ103 R34 RK3051 Chip R MCR03EZHJ123 R35 RK3051 Chip R MCR03EZHJ123 R36 RK3051 Chip R MCR03EZHJ123 R37 RK3051 Chip R MCR03EZHJ123 R38 RK3051 Chip R MCR03EZHJ123 R39 RK3050 Chip R MCR03EZHJ123 R39 RK3051 Chip R MCR03EZHJ123 R40 RK3051 Chip R MCR03EZHJ123 R41 RK3054 Chip R MCR03EZHJ123 R42 RK3044 Chip R MCR03EZHJ123 R43 RK3050 Chip R MCR03EZHJ123 R44 RK3051 Chip R MCR03EZHJ123 R46 RK3050 Chip R MCR03EZHJ123 R47 RK3050 Chip R MCR03EZHJ133 R48 RK3050 Chip R MCR03EZHJ233 R40 RK3051 Chip R MCR03EZHJ233 R41 RK3054 Chip R MCR03EZHJ233 R42 RK3044 Chip R MCR03EZHJ233 R44 RK3050 Chip R MCR03EZHJ23 R44 RK3050 Chip R MCR03EZHJ233 R44 RK3050 Chip R MCR03EZHJ233 R46 RK3050 Chip R MCR03EZHJ333 R47 RK3050 Chip R MCR03EZHJ333 R48 RK3050 Chip R MCR03EZHJ333 R48 RK3050 Chip R MCR03EZHJ333 R48 RK3050 Chip R MCR03EZHJ103 R49 RK3046 Chip R MCR03EZHJ103 R48 RK3050 Chip R MCR03EZHJ103 R59 RK3050 Chip R MCR03EZHJ103 R60 RK3048 Chip R MCR03EZHJ103 R61 RK3050 Chip R MCR03EZHJ103 R62 RK3060 Chip R MCR03EZHJ103 R63 RK3050 Chip R MCR03EZHJ103 R64 RK3050 Chip R MCR03EZHJ103 R65 RK3064 Chip R MCR03EZHJ103 R66 RK3064 Chip R MCR03EZHJ103 R67 RK3050 Chip R MCR03EZHJ103 R68 RK3060 Chip R MCR03EZHJ103 R71 RK3050 Chip R MCR03EZHJ103 R72 RK3060 Chip R MCR03EZHJ103 R73 RK3060 Chip R MCR03EZHJ103 R74 RK3060 Chip R MCR03EZHJ103 R75 RK3060 Chip R MCR03EZHJ103 R					1
R23         RK3050         Chip R         MCR03EZHJ103           R24         RK3071         Chip R         MCR03EZHJ103           R25         RK3050         Chip R         MCR03EZHJ103           R26         RK3050         Chip R         MCR03EZHJ103           R27         RK3060         Chip R         MCR03EZHJ103           R28         RK3040         Chip R         MCR03EZHJ103           R29         RK3041         Chip R         MCR03EZHJ103           R30         RK3044         Chip R         MCR03EZHJ123           R32         RK3061         Chip R         MCR03EZHJ123           R34         RK3061         Chip R         MCR03EZHJ123           R35         RK3061         Chip R         MCR03EZHJ123           R36         RK3061         Chip R         MCR03EZHJ123           R37         RK3061         Chip R         MCR03EZHJ123           R38         RK3061         Chip R         MCR03EZHJ123           R41         RK3060         Chip R         MCR03EZHJ123           R41         RK3061         Chip R         MCR03EZHJ103           R42         RK3046         Chip R         MCR03EZHJ323           R44			l '		1
R24         RK3071         Chip R         MCR03EZHJ154           R25         RK3050         Chip R         MCR03EZHJ103           R26         RK3050         Chip R         MCR03EZHJ103           R27         RK3050         Chip R         MCR03EZHJ103           R28         RK3040         Chip R         MCR03EZHJ103           R30         RK3044         Chip R         MCR03EZHJ103           R31         RK3060         Chip R         MCR03EZHJ123           R32         RK3061         Chip R         MCR03EZHJ123           R34         RK3061         Chip R         MCR03EZHJ123           R35         RK3061         Chip R         MCR03EZHJ123           R36         RK3061         Chip R         MCR03EZHJ123           R37         RK3061         Chip R         MCR03EZHJ123           R38         RK3061         Chip R         MCR03EZHJ123           R40         RK3050         Chip R         MCR03EZHJ123           R41         RK3061         Chip R         MCR03EZHJ123           R41         RK3061         Chip R         MCR03EZHJ123           R42         RK3061         Chip R         MCR03EZHJ123           R44	R23		l '		1
R26         RK3050         Chip R         MCR03EZHJ103           R27         RK3050         Chip R         MCR03EZHJ103           R28         RK3048         Chip R         MCR03EZHJ103           R30         RK3040         Chip R         MCR03EZHJ322           R32         RK3042         Chip R         MCR03EZHJ103           R34         RK3061         Chip R         MCR03EZHJ123           R35         RK3061         Chip R         MCR03EZHJ123           R36         RK3061         Chip R         MCR03EZHJ123           R36         RK3061         Chip R         MCR03EZHJ123           R37         RK3061         Chip R         MCR03EZHJ123           R37         RK3061         Chip R         MCR03EZHJ103           R40         RK3061         Chip R         MCR03EZHJ103           R40         RK3061         Chip R         MCR03EZHJ103           R41         RK3061         Chip R         MCR03EZHJ103           R41         RK3060         Chip R         MCR03EZHJ23           R42         RK3044         Chip R         MCR03EZHJ332           R44         RK3001         Chip R         MCR03EZHJ333           R47         <	R24		l '		1
R27         RK3050         Chip R.         MCR03EZHJ103           R28         RK3048         Chip R.         MCR03EZHJ103           R29         RK3040         Chip R.         MCR03EZHJ322           R32         RK3042         Chip R.         MCR03EZHJ222           R33         RK3060         Chip R.         MCR03EZHJ103           R34         RK3051         Chip R.         MCR03EZHJ123           R35         RK3061         Chip R.         MCR03EZHJ123           R36         RK3061         Chip R.         MCR03EZHJ123           R37         RK3061         Chip R.         MCR03EZHJ123           R38         RK3061         Chip R.         MCR03EZHJ123           R40         RK3061         Chip R.         MCR03EZHJ123           R41         RK3060         Chip R.         MCR03EZHJ123           R42         RK3041         Chip R.         MCR03EZHJ223           R44         RK3001         Chip R.         MCR03EZHJ223           R44         RK3001         Chip R.         MCR03EZHJ223           R44         RK3060         Chip R.         MCR03EZHJ223           R47         RK3060         Chip R.         MCR03EZHJ233	R25	RK3050	Chip R.	MCR03EZHJ103	1
R28         RK3048         Chip R         MCR03EZHJ032           R29         RK3060         Chip R         MCR03EZHJ032           R30         RK3044         Chip R         MCR03EZHJ032           R32         RK3050         Chip R         MCR03EZHJ123           R34         RK3051         Chip R         MCR03EZHJ123           R35         RK3051         Chip R         MCR03EZHJ123           R36         RK3054         Chip R         MCR03EZHJ123           R37         RK3061         Chip R         MCR03EZHJ123           R38         RK3061         Chip R         MCR03EZHJ123           R39         RK3060         Chip R         MCR03EZHJ123           R40         RK3061         Chip R         MCR03EZHJ103           R40         RK3061         Chip R         MCR03EZHJ123           R41         RK3061         Chip R         MCR03EZHJ223           R41         RK3061         Chip R         MCR03EZHJ223           R42         RK3001         Chip R         MCR03EZHJ223           R44         RK3001         Chip R         MCR03EZHJ223           R44         RK3001         Chip R         MCR03EZHJ221           R46	R26	RK3050	Chip R.	MCR03EZHJ103	1
R29         RK3060         Chip R.         MCR03EZHJ103           R30         RK3044         Chip R.         MCR03EZHJ332           R32         RK3060         Chip R.         MCR03EZHJ103           R34         RK3061         Chip R.         MCR03EZHJ123           R35         RK3061         Chip R.         MCR03EZHJ123           R36         RK3061         Chip R.         MCR03EZHJ123           R37         RK3061         Chip R.         MCR03EZHJ123           R38         RK3061         Chip R.         MCR03EZHJ123           R39         RK3050         Chip R.         MCR03EZHJ123           R40         RK3051         Chip R.         MCR03EZHJ103           R41         RK3064         Chip R.         MCR03EZHJ103           R42         RK3044         Chip R.         MCR03EZHJ323           R44         RK3001         Chip R.         MCR03EZHJ393           R47         RK5050         Chip R.         MCR03EZHJ203           R46         RK3030         Chip R.         MCR03EZHJ203           R47         RK5050         Chip R.         MCR03EZHJ103           R48         RK3060         Chip R.         MCR03EZHJ103		RK3050	Chip R.	MCR03EZHJ103	1
R30 RK3044 Chip R MCR03EZHJ332 RK3042 Chip R MCR03EZHJ332 RK3050 Chip R MCR03EZHJ123 MCR03EZHJ123 RK3661 Chip R MCR03EZHJ123 MCR03EZHJ123 RK36 RK3051 Chip R MCR03EZHJ123 MCR03EZHJ123 RK36 RK3054 Chip R MCR03EZHJ123 MCR03EZHJ123 RK36 RK3051 Chip R MCR03EZHJ123 RK37 RK3051 Chip R MCR03EZHJ123 RK38 RK3051 Chip R MCR03EZHJ123 RK38 RK3051 Chip R MCR03EZHJ123 RK36 RK3050 Chip R MCR03EZHJ123 RK364 Chip R MCR03EZHJ203 RK3050 Chip R MCR03EZHJ203 RK3050 Chip R MCR03EZHJ332 RK364 RK3001 Chip R MCR03EZHJ332 RK364 RK3050 Chip R MCR03EZHJ303 RK364 RK3050 Chip R MCR03EZHJ373 RK364 RK3050 Chip R MCR03EZHJ373 RK364 RK3050 Chip R MCR03EZHJ373 RK364 Chip R MCR03EZHJ302 RK364 Chip R MCR03EZHJ302 RK3058 Chip R MCR03EZHJ300 RK56 RK3058 Chip R MCR03EZHJ300 RK56 RK3065 Chip R MCR03EZHJ300 RK56 RK3064 Chip R MCR03EZHJ300 RK56 RK3065 Chip R MCR03EZHJ300 RK56 RK3065 Chip R MCR03EZHJ303 RK58 RK3050 Chip R MCR03EZHJ303 RK59 RK30					1
R32 RK3050 Chip R MCR03EZHJ103 R54 RK3051 Chip R MCR03EZHJ123 R55 RK3051 Chip R MCR03EZHJ123 R56 RK3051 Chip R MCR03EZHJ123 R57 RK3051 Chip R MCR03EZHJ123 R58 RK3051 Chip R MCR03EZHJ123 R58 RK3051 Chip R MCR03EZHJ123 R59 RK3050 Chip R MCR03EZHJ123 R59 RK3050 Chip R MCR03EZHJ123 R40 RK3051 Chip R MCR03EZHJ123 R41 RK3054 Chip R MCR03EZHJ123 R42 RK3044 Chip R MCR03EZHJ332 R44 RK3001 Chip R MCR03EZHJ332 R45 RK3050 Chip R MCR03EZHJ332 R46 RK3050 Chip R MCR03EZHJ332 R47 RK3050 Chip R MCR03EZHJ333 R48 RK3050 Chip R MCR03EZHJ303 R49 RK3046 Chip R MCR03EZHJ103 R48 RK3050 Chip R MCR03EZHJ103 R48 RK3050 Chip R MCR03EZHJ103 R49 RK3046 Chip R MCR03EZHJ103 R51 RK3061 Chip R MCR03EZHJ103 R52 RK3058 Chip R MCR03EZHJ102 R52 RK3058 Chip R MCR03EZHJ102 R53 RK3064 Chip R MCR03EZHJ102 R54 RK3065 Chip R MCR03EZHJ103 R55 RK3064 Chip R MCR03EZHJ104 R56 RK3065 Chip R MCR03EZHJ103 R57 RK3058 Chip R MCR03EZHJ104 R58 RK3050 Chip R MCR03EZHJ103 R57 RK3058 Chip R MCR03EZHJ104 R58 RK3050 Chip R MCR03EZHJ104 R56 RK3064 Chip R MCR03EZHJ104 R57 RK3058 Chip R MCR03EZHJ104 R58 RK3050 Chip R MCR03EZHJ104 R68 RK3050 Chip R MCR03EZHJ103 R69 RK3001 Chip R MCR03EZHJ104 R60 RK3050 Chip R MCR03EZHJ103 R61 RK3061 Chip R MCR03EZHJ103 R62 RK3060 Chip R MCR03EZHJ103 R63 RK3064 Chip R MCR03EZHJ103 R64 RK3050 Chip R MCR03EZHJ103 R65 RK3065 Chip R MCR03EZHJ103 R66 RK3060 Chip R MCR03EZHJ103 R67 RK3060 Chip R MCR03EZHJ103 R68 RK3050 Chip R MCR03EZHJ103 R69 RK3060 Chip R MCR03EZHJ103 R60 RK3060 Chip R MCR03EZHJ103 R61 RK3060 Chip R MCR03EZHJ103 R62 RK3060 Chip R MCR03EZHJ103 R63 RK3050 Chip R MCR03EZHJ103 R65 RK3060 Chip R MCR03EZHJ103 R67 RK3060 Chip R MCR03EZHJ103 R68 RK3050 Chip R MCR03EZHJ103 R69 RK3050 Chip R MCR03EZHJ103 R60 RK3050 Chip R MCR03EZHJ103 R61 RK3050 Chip R MCR03EZHJ103 R62 RK3060 Chip R MCR03EZHJ103 R63 RK3050 Chip R MCR03EZHJ103 R64 RK3050 Chip R MCR03EZHJ103 R65 RK3060 Chip R MCR03EZHJ104 R67 RK3060 Chip R MCR03EZHJ104 R68 RK3050 Chip R MCR03EZHJ104 R77 RK3050 Chip R MCR03EZHJ104 R78 RK3060 Chip R MCR03EZHJ104 R79 RK3050 Chip R MCR03EZHJ104					1
R33 RX3050 Chip R. MCR03EZHJ103 MCR03EZHJ123 R35 RX3051 Chip R. MCR03EZHJ123 R36 RX3054 Chip R. MCR03EZHJ123 R37 RX3051 Chip R. MCR03EZHJ123 R37 RX3051 Chip R. MCR03EZHJ123 R38 RX3051 Chip R. MCR03EZHJ123 R38 RX3051 Chip R. MCR03EZHJ123 R38 RX3050 Chip R. MCR03EZHJ123 R38 RX3050 Chip R. MCR03EZHJ123 R38 RX3050 Chip R. MCR03EZHJ123 R341 RX3054 Chip R. MCR03EZHJ123 R41 RX3054 Chip R. MCR03EZHJ223 R42 RX3044 Chip R. MCR03EZHJ223 R44 RX3001 Chip R. MCR03EZHJ332 R34 R44 RX3001 Chip R. MCR03EZHJ332 R34 R34 RX3050 Chip R. MCR03EZHJ303 R34 R34 RX3050 Chip R. MCR03EZHJ303 R34 R34 RX3050 Chip R. MCR03EZHJ103 R34 R34 RX3050 Chip R. MCR03EZHJ303 R34 R34 RX3050 Chip R. MCR03EZHJ303 R34 R34 RX3050 Chip R. MCR03EZHJ473 R56 RX3038 Chip R. MCR03EZHJ472 R56 RX3038 Chip R. MCR03EZHJ473 R56 RX3058 Chip R. MCR03EZHJ473 R56 RX3058 Chip R. MCR03EZHJ473 R57 RX3058 Chip R. MCR03EZHJ473 R58 RX3050 Chip R. MCR03EZHJ473 R58 RX3050 Chip R. MCR03EZHJ473 R58 RX3050 Chip R. MCR03EZHJ473 R57 RX3058 Chip R. MCR03EZHJ473 R58 RX3050 Chip R. MCR03EZHJ000 R55 RX3062 Chip R. MCR03EZHJ000 R55 RX3062 Chip R. MCR03EZHJ000 R56 RX3058 Chip R. MCR03EZHJ104 R66 RX3058 Chip R. MCR03EZHJ104 R66 RX3058 Chip R. MCR03EZHJ104 R66 RX3050 Chip R. MCR03EZHJ103 R67 RX3050 Chip R. MCR03EZHJ103 R68 RX3050 Chip R. MCR03EZHJ103 R68 RX3050 Chip R. MCR03EZHJ103 R68 RX3050 Chip R. MCR03EZHJ103 R67 RX3050 Chip R. MCR03EZHJ103 R68 RX3050 Chip R. M			l '		1
R34 RX3051 Chip R. MCR03EZHJ123 R35 RX3051 Chip R. MCR03EZHJ123 R36 RX3054 Chip R. MCR03EZHJ123 R37 RX3051 Chip R. MCR03EZHJ123 R38 RX3051 Chip R. MCR03EZHJ123 R39 RX3050 Chip R. MCR03EZHJ123 R39 RX3050 Chip R. MCR03EZHJ123 R39 RX3050 Chip R. MCR03EZHJ123 R39 RX3051 Chip R. MCR03EZHJ123 R39 RX3051 Chip R. MCR03EZHJ123 R44 RX3051 Chip R. MCR03EZHJ332 R42 RX3044 Chip R. MCR03EZHJ332 R42 RX3044 Chip R. MCR03EZHJ332 R44 RX3001 Chip R. MCR03EZHJ332 R45 R44 RX3001 Chip R. MCR03EZHJ300 R45 RX3050 Chip R. MCR03EZHJ303 R46 RX3057 Chip R. MCR03EZHJ103 R48 RX3050 Chip R. MCR03EZHJ103 R48 RX3050 Chip R. MCR03EZHJ103 R48 RX3050 Chip R. MCR03EZHJ103 R48 RX3061 Chip R. MCR03EZHJ102 R56 RX3081 Chip R. MCR03EZHJ102 R56 RX3080 Chip R. MCR03EZHJ102 R56 RX3080 Chip R. MCR03EZHJ103 R57 RX3088 Chip R. MCR03EZHJ104 R56 RX3081 Chip R. MCR03EZHJ104 R56 RX3082 Chip R. MCR03EZHJ104 R56 RX3082 Chip R. MCR03EZHJ104 R56 RX3082 Chip R. MCR03EZHJ104 R56 RX3084 Chip R. MCR03EZHJ104 R56 RX3082 Chip R. MCR03EZHJ104 R56 RX3080 Chip R. MCR03EZHJ104 R58 RX3050 Chip R. MCR03EZHJ103 R58 RX3050 Chip R. MCR03EZHJ103 R58 RX3050 Chip R. MCR03EZHJ103 R66 RX3094 Chip R. MCR03EZHJ103 R66 RX3094 Chip R. MCR03EZHJ103 R66 RX3050 Chip R. MCR03EZHJ103 R66 RX3050 Chip R. MCR03EZHJ103 R68 RX3050 Chip R. MCR03EZHJ103 R77 RX3050 Chip R. MCR03EZHJ103 R78 RX3050 Chip R. MCR03EZHJ103 R79 RX3050 Chip R. MCR03EZHJ104 RX3050 Chip R. MCR03EZHJ103 RX74 RX3050 Chip R. MCR03EZHJ104 RX3050 Chip R. MCR03EZHJ104 R					
R35 RK3051 Chip R MCR03EZHJ123 MCR03EZHJ123 R36 RK3051 Chip R MCR03EZHJ123 MCR03EZHJ123 Chip R MCR03EZHJ123 MCR03EZHJ123 MCR03EZHJ123 MCR03EZHJ123 MCR03EZHJ103 MCR03EZHJ103 MCR03EZHJ103 MCR03EZHJ103 MCR03EZHJ103 MCR03EZHJ103 MCR03EZHJ103 MCR03EZHJ103 MCR03EZHJ103 MCR03EZHJ322 MCR03EZHJ322 MCR03EZHJ322 MCR03EZHJ322 MCR03EZHJ322 MCR03EZHJ322 MCR03EZHJ322 MCR03EZHJ322 MCR03EZHJ323 MCR03EZHJ323 MCR03EZHJ323 MCR03EZHJ321 MCR03EZHJ323 MCR03EZHJ323 MCR03EZHJ323 MCR03EZHJ303 MCR03EZHJ303 MCR03EZHJ303 MCR03EZHJ303 MCR03EZHJ303 MCR03EZHJ403 MCR03EZHJ403 MCR03EZHJ403 MCR03EZHJ472 MCR03EZHJ472 MCR03EZHJ472 MCR03EZHJ472 MCR03EZHJ472 MCR03EZHJ472 MCR03EZHJ473 MCR03EZHJ473 MCR03EZHJ473 MCR03EZHJ473 MCR03EZHJ473 MCR03EZHJ223 MCR03EZHJ223 MCR03EZHJ223 MCR03EZHJ473 MCR03EZHJ000 MCR03EZHJ104 MCR03EZHJ104 MCR03EZHJ104 MCR03EZHJ104 MCR03EZHJ103 MCR03EZHJ104 MCR03EZHJ103 M			l '		
R36 RK3054 Chip R. MCR03EZHJ223 R37 RK3051 Chip R. MCR03EZHJ123 R38 RK3050 Chip R. MCR03EZHJ123 R39 RK3050 Chip R. MCR03EZHJ103 R40 RK3051 Chip R. MCR03EZHJ103 R41 RK3054 Chip R. MCR03EZHJ123 R42 RK3044 Chip R. MCR03EZHJ223 R42 RK30044 Chip R. MCR03EZHJ223 R44 RK3001 Chip R. MCR03EZHJ221 R46 RK3030 Chip R. MCR03EZHJ221 R46 RK3057 Chip R. MCR03EZHJ221 R47 RK3050 Chip R. MCR03EZHJ103 R48 RK3050 Chip R. MCR03EZHJ103 R48 RK3050 Chip R. MCR03EZHJ103 R49 RK3046 Chip R. MCR03EZHJ103 R59 RK3046 Chip R. MCR03EZHJ102 R50 RK3038 Chip R. MCR03EZHJ102 R51 RK3061 Chip R. MCR03EZHJ102 R52 RK3058 Chip R. MCR03EZHJ102 R53 RK3054 Chip R. MCR03EZHJ103 R54 RK30061 Chip R. MCR03EZHJ102 R55 RK3050 Chip R. MCR03EZHJ103 R56 RK3064 Chip R. MCR03EZHJ1000 R56 RK3065 Chip R. MCR03EZHJ104 R56 RK3066 Chip R. MCR03EZHJ104 R57 RK3058 Chip R. MCR03EZHJ104 R68 RK3050 Chip R. MCR03EZHJ104 R67 RK3058 Chip R. MCR03EZHJ104 R68 RK3050 Chip R. MCR03EZHJ103 R69 RK3001 Chip R. MCR03EZHJ103 R69 RK3001 Chip R. MCR03EZHJ103 R60 RK3044 Chip R. MCR03EZHJ103 R60 RK3040 Chip R. MCR03EZHJ103 R60 RK3040 Chip R. MCR03EZHJ103 R60 RK3040 Chip R. MCR03EZHJ103 R60 RK3050 Chip R. MCR03EZHJ103 R61 RK3001 Chip R. MCR03EZHJ103 R62 RK3050 Chip R. MCR03EZHJ103 R63 RK3050 Chip R. MCR03EZHJ103 R64 RK3050 Chip R. MCR03EZHJ103 R65 RK3050 Chip R. MCR03EZHJ103 R66 RK3050 Chip R. MCR03EZHJ103 R67 RK3050 Chip R. MCR03EZHJ103 R70 RK3050 Chip R. MCR03EZHJ103 R71 RK3050 Chip R. MCR03EZHJ103 R72 RK3050 Chip R. MCR03EZHJ103 R73 RK3001 Chip R. MCR03EZHJ103 R74 RK3050 Chip R. MCR03EZHJ103 R75 RK3050 Chip R. MCR03EZHJ103 R77 RK3050 Chip R. MCR03EZHJ103 R78 RK3050 Chip R. MCR03EZHJ103 R79 RK3050 Chip R. MCR03EZHJ103 R71 RK3050 Chip R. MCR03EZHJ103 R72 RK3050 Chip R. MCR03EZHJ103 R73 RK3001 Chip R. MCR03EZHJ103 R74 RK3050 Chip R. MCR03EZHJ103 R75 RK3050 Chip R. MCR03EZHJ103 R76 RK3050 Chip R. MCR03EZHJ103 R77 RK3050 Chip R. MCR03EZHJ103 R78 RK3050 Chip R. MCR03EZHJ104 R78 RK3050 Chip R. MCR03EZHJ103 R79 RK3050 Chip R. MCR03EZHJ104 R78 RK3050 Chip R. MCR03EZHJ104 R78 RK3060 Chip R. MCR03EZH			l '		1
R37 RK3051 Chip R MCR03EZHJ123 R38 RK3050 Chip R MCR03EZHJ123 MCR03EZHJ123 R40 RK3051 Chip R MCR03EZHJ123 MCR03EZHJ123 R41 RK3054 Chip R MCR03EZHJ123 MCR03EZHJ233 R41 RK3054 Chip R MCR03EZHJ233 MCR03EZHJ233 Chip R MCR03EZHJ332 R44 RK3001 Chip R MCR03EZHJ332 R45 RK3050 Chip R MCR03EZHJ393 MCR03EZHJ393 R47 RK3050 Chip R MCR03EZHJ393 R47 RK3050 Chip R MCR03EZHJ103 R49 RK3050 Chip R MCR03EZHJ103 R49 RK3046 Chip R MCR03EZHJ103 R49 RK3046 Chip R MCR03EZHJ102 R51			l '		1
R38 RK3051 Chip R. MCR03EZHJ103 R40 RK3050 Chip R. MCR03EZHJ103 R41 RK3054 Chip R. MCR03EZHJ223 R41 RK3054 Chip R. MCR03EZHJ223 R42 RK3044 Chip R. MCR03EZHJ232 R44 RK3001 Chip R. MCR03EZHJ322 R44 RK3001 Chip R. MCR03EZHJ322 R45 RK3030 Chip R. MCR03EZHJ221 R46 RK3057 Chip R. MCR03EZHJ221 R47 RK3050 Chip R. MCR03EZHJ033 R48 RK3050 Chip R. MCR03EZHJ103 R48 RK3050 Chip R. MCR03EZHJ103 R49 RK3046 Chip R. MCR03EZHJ102 R51 RK3061 Chip R. MCR03EZHJ102 R51 RK3061 Chip R. MCR03EZHJ102 R52 RK3058 Chip R. MCR03EZHJ102 R52 RK3056 Chip R. MCR03EZHJ102 R53 RK3054 Chip R. MCR03EZHJ223 R54 RK3001 Chip R. MCR03EZHJ23 R55 RK3050 Chip R. MCR03EZHJ23 R56 RK3062 Chip R. MCR03EZHJ104 R57 RK3058 Chip R. MCR03EZHJ104 R58 RK3050 Chip R. MCR03EZHJ104 R67 RK3058 Chip R. MCR03EZHJ104 R67 RK3058 Chip R. MCR03EZHJ104 R67 RK3050 Chip R. MCR03EZHJ103 R69 RK3001 Chip R. MCR03EZHJ103 R60 RK3044 Chip R. MCR03EZHJ103 R60 RK3044 Chip R. MCR03EZHJ103 R60 RK3040 Chip R. MCR03EZHJ103 R61 RK3001 Chip R. MCR03EZHJ103 R62 RK3060 Chip R. MCR03EZHJ000 R65 RK3060 Chip R. MCR03EZHJ000 R66 RK3044 Chip R. MCR03EZHJ003 R67 RK3050 Chip R. MCR03EZHJ003 R68 RK3050 Chip R. MCR03EZHJ003 R69 RK3001 Chip R. MCR03EZHJ003 R60 RK3040 Chip R. MCR03EZHJ003 R61 RK3001 Chip R. MCR03EZHJ003 R62 RK3060 Chip R. MCR03EZHJ003 R63 RK3059 Chip R. MCR03EZHJ103 R64 RK3050 Chip R. MCR03EZHJ103 R65 RK3050 Chip R. MCR03EZHJ103 R66 RK3059 Chip R. MCR03EZHJ103 R70 RK3050 Chip R. MCR03EZHJ103 R71 RK3050 Chip R. MCR03EZHJ103 R71 RK3050 Chip R. MCR03EZHJ103 R72 RK3050 Chip R. MCR03EZHJ103 R73 RK3001 Chip R. MCR03EZHJ103 R74 RK3050 Chip R. MCR03EZHJ103 R75 RK3050 Chip R. MCR03EZHJ103 R77 RK3050 Chip R. MCR03EZHJ103 R78 RK3050 Chip R. MCR03EZHJ103 R79 RK3050 Chip R. MCR03EZHJ103	R37		l '		1
R39 RK3050 Chip R. MCR03EZHJ103 R40 RK3051 Chip R. MCR03EZHJ123 R41 RK3054 Chip R. MCR03EZHJ123 R42 RK3044 Chip R. MCR03EZHJ322 R44 RK30041 Chip R. MCR03EZHJ322 R45 RK3030 Chip R. MCR03EZHJ322 R46 RK30057 Chip R. MCR03EZHJ300 R47 RK3050 Chip R. MCR03EZHJ103 R48 RK3050 Chip R. MCR03EZHJ103 R49 RK3046 Chip R. MCR03EZHJ103 R49 RK3046 Chip R. MCR03EZHJ103 R49 RK3046 Chip R. MCR03EZHJ102 R50 RK3038 Chip R. MCR03EZHJ472 R50 RK3036 Chip R. MCR03EZHJ472 R51 RK3061 Chip R. MCR03EZHJ473 R52 RK3058 Chip R. MCR03EZHJ473 R53 RK3054 Chip R. MCR03EZHJ473 R54 RK3001 Chip R. MCR03EZHJ473 R55 RK3062 Chip R. MCR03EZHJ473 R56 RK3062 Chip R. MCR03EZHJ100 R57 RK3058 Chip R. MCR03EZHJ104 R58 RK3050 Chip R. MCR03EZHJ104 R58 RK3050 Chip R. MCR03EZHJ104 R59 RK3001 Chip R. MCR03EZHJ104 R60 RK3044 Chip R. MCR03EZHJ103 R60 RK3044 Chip R. MCR03EZHJ103 R61 RK3001 Chip R. MCR03EZHJ103 R62 RK3064 Chip R. MCR03EZHJ103 R63 RK3059 Chip R. MCR03EZHJ103 R64 RK3050 Chip R. MCR03EZHJ103 R65 RK3050 Chip R. MCR03EZHJ103 R65 RK3060 Chip R. MCR03EZHJ103 R66 RK3060 Chip R. MCR03EZHJ103 R67 RK3050 Chip R. MCR03EZHJ103 R68 RK3050 Chip R. MCR03EZHJ103 R69 RK3050 Chip R. MCR03EZHJ103 R67 RK3050 Chip R. MCR03EZHJ103 R68 RK3050 Chip R. MCR03EZHJ103 R69 RK3050 Chip R. MCR03EZHJ103 R69 RK3050 Chip R. MCR03EZHJ103 R60 RK3050 Chip R. MCR03EZHJ103 R61 RK3050 Chip R. MCR03EZHJ103 R62 RK3050 Chip R. MCR03EZHJ103 R63 RK3050 Chip R. MCR03EZHJ103 R64 RK3050 Chip R. MCR03EZHJ103 R65 RK3050 Chip R. MCR03EZHJ103 R67 RK3050 Chip R. MCR03EZHJ103 R68 RK3050 Chip R. MCR03EZHJ103 R69 RK3050 Chip R. MCR03EZHJ103 R71 RK3050 Chip R. MCR03EZHJ103 R72 RK3050 Chip R. MCR03EZHJ103 R73 RK3010 Chip R. MCR03EZHJ103 R74 RK3050 Chip R. MCR03EZHJ104 R75 RK3050 Chip R. MCR03EZHJ104 R76 RK3060 Chip R. MCR03EZHJ104 R77 RK3050 Chip R. MCR03EZHJ	R38				1
R40         RK3051         Chip R.         MCR03EZHJ1223           R41         RK3054         Chip R.         MCR03EZHJ223           R42         RK3004         Chip R.         MCR03EZHJ020           R44         RK3001         Chip R.         MCR03EZHJ021           R45         RK3030         Chip R.         MCR03EZHJ021           R46         RK3050         Chip R.         MCR03EZHJ033           R47         RK3060         Chip R.         MCR03EZHJ103           R48         RK3050         Chip R.         MCR03EZHJ103           R49         RK3046         Chip R.         MCR03EZHJ102           R50         RK3038         Chip R.         MCR03EZHJ102           R51         RK3061         Chip R.         MCR03EZHJ000           R51         RK3064         Chip R.         MCR03EZHJ000           R52         RK3054         Chip R.         MCR03EZHJ000           R55         RK3064         Chip R.         MCR03EZHJ000           R56         RK3064         Chip R.         MCR03EZHJ103           R67         RK3064         Chip R.         MCR03EZHJ103           R67         RK3065         Chip R.         MCR03EZHJ103 <th< td=""><td>R39</td><td></td><td></td><td></td><td>1</td></th<>	R39				1
R42         RK3044         Chip R.         MCR03EZHJ332           R44         RK3001         Chip R.         MCR03EZHJ000           R45         RK3030         Chip R.         MCR03EZHJ221           R46         RK3057         Chip R.         MCR03EZHJ103           R47         RK3050         Chip R.         MCR03EZHJ103           R48         RK3046         Chip R.         MCR03EZHJ102           R50         RK3038         Chip R.         MCR03EZHJ102           R51         RK3061         Chip R.         MCR03EZHJ1023           R51         RK3065         Chip R.         MCR03EZHJ1023           R52         RK3068         Chip R.         MCR03EZHJ223           R53         RK3054         Chip R.         MCR03EZHJ223           R54         RK3061         Chip R.         MCR03EZHJ223           R54         RK3062         Chip R.         MCR03EZHJ233           R56         RK3062         Chip R.         MCR03EZHJ100           R56         RK3062         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103 <t< td=""><td>R40</td><td></td><td></td><td></td><td>1</td></t<>	R40				1
R44         RK3001         Chip R.         MCR03EZHJ000           R45         RK3050         Chip R.         MCR03EZHJ021           R46         RK3057         Chip R.         MCR03EZHJ0393           R47         RK3050         Chip R.         MCR03EZHJ103           R48         RK3050         Chip R.         MCR03EZHJ102           R48         RK3038         Chip R.         MCR03EZHJ102           R50         RK3038         Chip R.         MCR03EZHJ472           R50         RK3038         Chip R.         MCR03EZHJ473           R51         RK3061         Chip R.         MCR03EZHJ473           R52         RK3054         Chip R.         MCR03EZHJ000           R55         RK3064         Chip R.         MCR03EZHJ104           R56         RK3064         Chip R.         MCR03EZHJ104           R57         RK3058         Chip R.         MCR03EZHJ103           R66         RK3064         Chip R.         MCR03EZHJ473           R58         RK3050         Chip R.         MCR03EZHJ473           R68         RK3050         Chip R.         MCR03EZHJ473           R61         RK3001         Chip R.         MCR03EZHJ473 <td< td=""><td>R41</td><td></td><td>Chip R.</td><td></td><td>1</td></td<>	R41		Chip R.		1
R46         RK3030         Chip R.         MCR03EZHJ221           R46         RK3067         Chip R.         MCR03EZHJ393           R47         RK3060         Chip R.         MCR03EZHJ103           R48         RK3060         Chip R.         MCR03EZHJ472           R50         RK3038         Chip R.         MCR03EZHJ472           R51         RK3061         Chip R.         MCR03EZHJ473           R52         RK3068         Chip R.         MCR03EZHJ473           R53         RK3064         Chip R.         MCR03EZHJ473           R54         RK3001         Chip R.         MCR03EZHJ400           R55         RK3062         Chip R.         MCR03EZHJ400           R55         RK3062         Chip R.         MCR03EZHJ400           R56         RK3068         Chip R.         MCR03EZHJ400           R57         RK3058         Chip R.         MCR03EZHJ473           R58         RK3050         Chip R.         MCR03EZHJ473           R58         RK3050         Chip R.         MCR03EZHJ473           R58         RK3050         Chip R.         MCR03EZHJ473           R61         RK3001         Chip R.         MCR03EZHJ400	R42				1
R46         RK3057         Chip R.         MCR03EZHJ393           R47         RK3050         Chip R.         MCR03EZHJ103           R48         RK3060         Chip R.         MCR03EZHJ103           R49         RK3046         Chip R.         MCR03EZHJ472           R50         RK3038         Chip R.         MCR03EZHJ423           R51         RK3061         Chip R.         MCR03EZHJ473           R52         RK3068         Chip R.         MCR03EZHJ473           R54         RK3001         Chip R.         MCR03EZHJ000           R55         RK3062         Chip R.         MCR03EZHJ104           R56         RK3064         Chip R.         MCR03EZHJ104           R57         RK3068         Chip R.         MCR03EZHJ103           R57         RK3068         Chip R.         MCR03EZHJ103           R58         RK3001         Chip R.         MCR03EZHJ103           R60         RK3001         Chip R.         MCR03EZHJ000           R61         RK3000         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ103           R63         RK3060         Chip R.         MCR03EZHJ103	R44				1
R47 RK3050 Chip R. MCR03EZHJ103 Chip R. MCR03EZHJ103 R48 RK3050 Chip R. MCR03EZHJ102 R50 RK3046 Chip R. MCR03EZHJ172 R50 RK3046 Chip R. MCR03EZHJ472 R50 RK3061 Chip R. MCR03EZHJ473 R51 RK3061 Chip R. MCR03EZHJ473 R52 RK3058 Chip R. MCR03EZHJ473 R53 RK3054 Chip R. MCR03EZHJ473 R55 RK3062 Chip R. MCR03EZHJ1000 R55 RK3062 Chip R. MCR03EZHJ104 R56 RK3064 Chip R. MCR03EZHJ104 R56 RK3064 Chip R. MCR03EZHJ104 R56 RK3065 Chip R. MCR03EZHJ103 R58 RK3001 Chip R. MCR03EZHJ103 R58 RK3001 Chip R. MCR03EZHJ103 R59 RK3001 Chip R. MCR03EZHJ000 R60 RK3044 Chip R. MCR03EZHJ000 R60 RK3044 Chip R. MCR03EZHJ000 R62 RK3060 Chip R. MCR03EZHJ000 R62 RK3060 Chip R. MCR03EZHJ000 R65 RK3050 Chip R. MCR03EZHJ000 R66 RK3050 Chip R. MCR03EZHJ003 R66 RK3050 Chip R. MCR03EZHJ003 R66 RK3050 Chip R. MCR03EZHJ103 R68 RK3050 Chip R. MCR03EZHJ103 R68 RK3050 Chip R. MCR03EZHJ103 R68 RK3050 Chip R. MCR03EZHJ103 R70 RK3050 Chip R. MCR03EZHJ103 R71 RK3050 Chip R. MCR03EZHJ103 R72 RK3050 Chip R. MCR03EZHJ103 R71 RK3050 Chip R. MCR03EZHJ103 R72 RK3050 Chip R. MCR03EZHJ103 R73 RK3001 Chip R. MCR03EZHJ103 R74 RK3050 Chip R. MCR03EZHJ103 R77 RK3050 Chip R. MCR03EZHJ103 R78 RK3061 Chip R. MCR03EZHJ103 R79 RK3050 Chip R. MCR03EZHJ103 R79 RK3050 Chip R. MCR03EZHJ103 R80 RK3058 Chip R. MCR03EZHJ103 R80 RK3058 Chip R. MCR03EZHJ103 R80 RK3058 Chip R. MCR03EZHJ103 R81 RK3065 Chip R. MCR03EZHJ103 R82 RK3064 Chip R. MCR03EZHJ103 R88 RK3062 Chip R. MCR03EZHJ104 R88 RK3060 Chip R. MCR03EZHJ105 R88 RK3062 Chip R. MCR03EZHJ105 R88 RK3062 Chip R. MCR03EZHJ105 R88 RK3062 Chip R. MCR03EZHJ104 Trim.Pot MVR22HXBRN103 Trim.Pot MVR22HXBRN103 Trim.Pot MVR22HXBRN103 Trim.Pot MVR22HXBRN103 RA14 R497.9872MHZ UP4042 PCB EJ41U (TNC) 0.1	R45				1
R48         RK3050         Chip R.         MCR03EZHJ103           R49         RK3046         Chip R.         MCR03EZHJ472           R50         RK3038         Chip R.         MCR03EZHJ472           R51         RK3061         Chip R.         MCR03EZHJ473           R52         RK3058         Chip R.         MCR03EZHJ473           R53         RK3064         Chip R.         MCR03EZHJ000           R55         RK3062         Chip R.         MCR03EZHJ100           R56         RK3064         Chip R.         MCR03EZHJ1473           R56         RK3065         Chip R.         MCR03EZHJ100           R57         RK3050         Chip R.         MCR03EZHJ473           R58         RK3050         Chip R.         MCR03EZHJ473           R59         RK3001         Chip R.         MCR03EZHJ473           R60         RK3060         Chip R.         MCR03EZHJ322           R61         RK3001         Chip R.         MCR03EZHJ322           R62         RK3060         Chip R.         MCR03EZHJ103           R63         RK3050         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103 <td< td=""><td></td><td></td><td></td><td></td><td>1</td></td<>					1
R49         RK3046         Chip R.         MCR03EZHJ472           R50         RK3038         Chip R.         MCR03EZHJ402           R51         RK3061         Chip R.         MCR03EZHJ823           R52         RK3068         Chip R.         MCR03EZHJ473           R53         RK3064         Chip R.         MCR03EZHJ000           R55         RK3062         Chip R.         MCR03EZHJ104           R56         RK3064         Chip R.         MCR03EZHJ104           R57         RK3068         Chip R.         MCR03EZHJ103           R57         RK3068         Chip R.         MCR03EZHJ103           R59         RK3001         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ000           R61         RK3001         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ000           R63         RK3029         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103			l '		1
R50         RK3038         Chip R.         MCR03EZHJ102           R611         RK3061         Chip R.         MCR03EZHJ233           R622         RK3068         Chip R.         MCR03EZHJ473           R63         RK3064         Chip R.         MCR03EZHJ000           R55         RK3061         Chip R.         MCR03EZHJ104           R656         RK3064         Chip R.         MCR03EZHJ104           R657         RK3058         Chip R.         MCR03EZHJ103           R57         RK3058         Chip R.         MCR03EZHJ103           R69         RK3001         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ000           R60         RK3060         Chip R.         MCR03EZHJ000           R61         RK3001         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ000           R63         RK30250         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103					1
R51         RK3061         Chip R.         MCR03EZHJ823           R52         RK3058         Chip R.         MCR03EZHJ473           R53         RK3054         Chip R.         MCR03EZHJ000           R54         RK3001         Chip R.         MCR03EZHJ000           R55         RK3062         Chip R.         MCR03EZHJ104           R56         RK3064         Chip R.         MCR03EZHJ103           R57         RK3058         Chip R.         MCR03EZHJ103           R58         RK3050         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ000           R61         RK3001         Chip R.         MCR03EZHJ000           R61         RK3001         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ000           R63         RK3050         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103			l '		1
R52         RK3058         Chip R.         MCR03EZHJ473           R53         RK3054         Chip R.         MCR03EZHJ203           R54         RK3001         Chip R.         MCR03EZHJ100           R55         RK3062         Chip R.         MCR03EZHJ104           R56         RK3064         Chip R.         MCR03EZHJ154           R57         RK3058         Chip R.         MCR03EZHJ000           R58         RK3001         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ063           R61         RK3001         Chip R.         MCR03EZHJ063           R62         RK3060         Chip R.         MCR03EZHJ063           R63         RK3029         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103					
R53         RK3054         Chip R.         MCR03EZHJ223           R54         RK3001         Chip R.         MCR03EZHJ000           R55         RK3062         Chip R.         MCR03EZHJ104           R56         RK3064         Chip R.         MCR03EZHJ154           R57         RK3058         Chip R.         MCR03EZHJ103           R58         RK3050         Chip R.         MCR03EZHJ100           R60         RK3044         Chip R.         MCR03EZHJ000           R60         RK3061         Chip R.         MCR03EZHJ000           R61         RK3001         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ000           R63         RK3050         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3059         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103			l '		
R54         RK3001         Chip R.         MCR03EZHJ000           R55         RK3062         Chip R.         MCR03EZHJ104           R56         RK3064         Chip R.         MCR03EZHJ154           R57         RK3058         Chip R.         MCR03EZHJ473           R58         RK3001         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ000           R61         RK3001         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ103           R63         RK3029         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103					1
R55         RK3062         Chip R.         MCR03EZHJ104           R56         RK3064         Chip R.         MCR03EZHJ104           R57         RK3058         Chip R.         MCR03EZHJ173           R58         RK3050         Chip R.         MCR03EZHJ103           R59         RK3001         Chip R.         MCR03EZHJ000           R60         RK30044         Chip R.         MCR03EZHJ063           R61         RK3001         Chip R.         MCR03EZHJ063           R62         RK3060         Chip R.         MCR03EZHJ063           R63         RK3029         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R66         RK3059         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3054         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103 <td< td=""><td></td><td></td><td>l '</td><td></td><td>1</td></td<>			l '		1
R56         RK3064         Chip R.         MCR03EZHJ154           R57         RK3058         Chip R.         MCR03EZHJ173           R58         RK3050         Chip R.         MCR03EZHJ103           R59         RK3001         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ000           R61         RK3001         Chip R.         MCR03EZHJ083           R61         RK3001         Chip R.         MCR03EZHJ083           R62         RK3060         Chip R.         MCR03EZHJ181           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103					1
R58         RK3050         Chip R.         MCR03EZHJ103           R59         RK3001         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ000           R61         RK3001         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ0683           R63         RK3029         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3059         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ104 <td< td=""><td>R56</td><td>RK3064</td><td>l '</td><td></td><td>1</td></td<>	R56	RK3064	l '		1
R59         RK3001         Chip R.         MCR03EZHJ000           R60         RK3044         Chip R.         MCR03EZHJ0302           R61         RK3001         Chip R.         MCR03EZHJ060           R62         RK3060         Chip R.         MCR03EZHJ063           R63         RK3029         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3050         Chip R.         MCR03EZHJ103           R74         RK3068         Chip R.         MCR03EZHJ104 <td< td=""><td>R57</td><td>RK3058</td><td>Chip R.</td><td>MCR03EZHJ473</td><td>1</td></td<>	R57	RK3058	Chip R.	MCR03EZHJ473	1
R60         RK3044         Chip R.         MCR03EZHJ332           R61         RK3001         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ083           R63         RK3029         Chip R.         MCR03EZHJ103           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3050         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R69         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ103           R74         RK3062         Chip R.         MCR03EZHJ104           R75         RK3062         Chip R.         MCR03EZHJ104	R58	RK3050	Chip R.	MCR03EZHJ103	1
R61         RK3001         Chip R.         MCR03EZHJ000           R62         RK3060         Chip R.         MCR03EZHJ083           R63         RK3029         Chip R.         MCR03EZHJ181           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3059         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3050         Chip R.         MCR03EZHJ103           R69         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ000           R74         RK3058         Chip R.         MCR03EZHJ104           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3060         Chip R.         MCR03EZHJ103	R59	RK3001	Chip R.	MCR03EZHJ000	1
R62         RK3060         Chip R.         MCR03EZHJ683           R63         RK3029         Chip R.         MCR03EZHJ181           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3059         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3054         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ104           R74         RK3058         Chip R.         MCR03EZHJ104           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ103           R77         RK3030         Chip R.         MCR03EZHJ103	R60				1
R63         RK3029         Chip R.         MCR03EZHJ181           R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3059         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ103           R74         RK3058         Chip R.         MCR03EZHJ104           R75         RK3062         Chip R.         MCR03EZHJ104           R77         RK3030         Chip R.         MCR03EZHJ104           R77         RK3030         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103	R61				1
R64         RK3050         Chip R.         MCR03EZHJ103           R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3059         Chip R.         MCR03EZHJ563           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3054         Chip R.         MCR03EZHJ103           R69         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ103           R74         RK3058         Chip R.         MCR03EZHJ104           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3062         Chip R.         MCR03EZHJ104           R77         RK3030         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ221           R78         RK3050         Chip R.         MCR03EZHJ221           R78         RK3050         Chip R.         MCR03EZHJ473					1
R65         RK3050         Chip R.         MCR03EZHJ103           R66         RK3059         Chip R.         MCR03EZHJ103           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3054         Chip R.         MCR03EZHJ223           R69         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ103           R74         RK3058         Chip R.         MCR03EZHJ104           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ104           R77         RK3030         Chip R.         MCR03EZHJ103           R78         RK3050         Chip R.         MCR03EZHJ103           R80         RK3056         Chip R.         MCR03EZHJ103           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ103					1
R66         RK3059         Chip R.         MCR03EZHJ563           R67         RK3050         Chip R.         MCR03EZHJ103           R68         RK3054         Chip R.         MCR03EZHJ103           R69         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3050         Chip R.         MCR03EZHJ103           R73         RK3050         Chip R.         MCR03EZHJ100           R74         RK3058         Chip R.         MCR03EZHJ104           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3050         Chip R.         MCR03EZHJ221           R77         RK3030         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ373					1
R67         RK3050         Chip R.         MCR03EZHJ103           R88         RK3054         Chip R.         MCR03EZHJ103           R69         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ103           R74         RK3068         Chip R.         MCR03EZHJ473           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ104           R77         RK3030         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ103           R83         RK3074         Chip R.         MCR03EZHJ105			l '		1
R68         RK3054         Chip R.         MCR03EZHJ223           R69         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ100           R74         RK3058         Chip R.         MCR03EZHJ100           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ104           R77         RK3030         Chip R.         MCR03EZHJ103           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ332           R83         RK3074         Chip R.         MCR03EZHJ103           R85         RK3062         Chip R.         MCR03EZHJ104					1
R69         RK3050         Chip R.         MCR03EZHJ103           R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ000           R74         RK3058         Chip R.         MCR03EZHJ104           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ104           R77         RK3030         Chip R.         MCR03EZHJ103           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ103           R81         RK3058         Chip R.         MCR03EZHJ332           R82         RK3044         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ103           R87         RK3062         Chip R.         MCR03EZHJ104					
R70         RK3050         Chip R.         MCR03EZHJ103           R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ000           R74         RK3068         Chip R.         MCR03EZHJ473           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ104           R77         RK3030         Chip R.         MCR03EZHJ103           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ322           R83         RK3044         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ105           R85         RK3046         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MCR03EZHJ104 <td< td=""><td></td><td></td><td></td><td></td><td>1</td></td<>					1
R71         RK3050         Chip R.         MCR03EZHJ103           R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ000           R74         RK3068         Chip R.         MCR03EZHJ173           R75         RK3062         Chip R.         MCR03EZHJ154           R76         RK3064         Chip R.         MCR03EZHJ154           R77         RK3030         Chip R.         MCR03EZHJ221           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ473           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ473           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ105           R85         RK3046         Chip R.         MCR03EZHJ104           VR1         R87         RK3062         Chip R.         MCR03EZHJ104           VR1         R88         RK3062         Chip R.         MCR03EZ					1
R72         RK3050         Chip R.         MCR03EZHJ103           R73         RK3001         Chip R.         MCR03EZHJ000           R74         RK3068         Chip R.         MCR03EZHJ173           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ154           R77         RK3030         Chip R.         MCR03EZHJ153           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ332           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ103           R88         RK3062         Chip R.         MCR03EZHJ104           R88         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103 <t< td=""><td>R71</td><td></td><td>l '</td><td></td><td>1</td></t<>	R71		l '		1
R73         RK3001         Chip R.         MCR03EZHJ000           R74         RK3058         Chip R.         MCR03EZHJ173           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ154           R77         RK3030         Chip R.         MCR03EZHJ221           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ103           R87         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103	R72				1
R74         RK3058         Chip R.         MCR03EZHJ473           R75         RK3062         Chip R.         MCR03EZHJ104           R76         RK3064         Chip R.         MCR03EZHJ154           R77         RK3030         Chip R.         MCR03EZHJ221           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ473           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ473           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ103           R85         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           VR2         UX1253         Connector         VIRE TNC           <	R73	RK3001			1
R76         RK3064         Chip R.         MCR03EZHJ154           R77         RK3030         Chip R.         MCR03EZHJ221           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ332           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ104           R88         RK3062         Chip R.         MCR03EZHJ104           R88         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           VR2         LY1263         Connector         WIR TNC           X1         XQ0124         Xtal         AT-49 7.9872MHZ <t< td=""><td>R74</td><td>RK3058</td><td></td><td>MCR03EZHJ473</td><td>1</td></t<>	R74	RK3058		MCR03EZHJ473	1
R77         RK3030         Chip R.         MCR03EZHJ221           R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ105           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ104           R87         RK3062         Chip R.         MCR03EZHJ104           VV1         RH0142         Trim.Pot         MCR03EZHJ104           VV2         RH0142         Trim.Pot         MVR22HXBRN103           VV2         RH0142         Trim.Pot         MVR22HXBRN103           VV2         UV1253         Connector         WIRE TNC           X1         XQ0124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.125           F60030         VELCRO         A           F60040         Tim.bulat		RK3062	Chip R.	MCR03EZHJ104	1
R78         RK3050         Chip R.         MCR03EZHJ103           R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ473           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ104           R88         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           W2         UX1263         Connector         WIRE TNC           X1         XQ0124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.124           F60040         TS0024         Insulator         LITHIUM BATT.           TZ0024         Insulator         SILICON 49U	R76				1
R79         RK3050         Chip R.         MCR03EZHJ103           R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ332           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ104           R87         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RY1263         Connector         WIRE TNC           X1         XQQ124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.125           FF0033         VELCRO         A           F60040         Cushion         TZ0024         Insulator         LITHIUM BATT.           TZ0056         Insulator         SILICON 49U					1
R80         RK3058         Chip R.         MCR03EZHJ473           R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ332           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ104           R88         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR23EXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RY2         UX1263         Connector         WIR TNC           X1         XQQ124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.125           FF0033         VELCRO         A           FG0040         Cushion         TZ0024         Insulator         LITHIUM BATT.           TZ0056         Insulator         SILICON 49U	R78				1
R81         RK3058         Chip R.         MCR03EZHJ473           R82         RK3044         Chip R.         MCR03EZHJ332           R83         RK3074         Chip R.         MCR03EZHJ105           R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ104           R87         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           VW2         UX1263         Connector         WIRE TNC           X1         XQ0124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.125           F60030         VELCRO         A           F60040         Cushion         LITHIUM BATT.           T20024         Insulator         SILICON 49U					1
R82 RK3044 Chip R. MCR03EZHJ332 Chip R. R830 RK3074 Chip R. MCR03EZHJ105 R84 RK3050 Chip R. MCR03EZHJ105 R85 RK3046 Chip R. MCR03EZHJ1072 Chip R. MCR03EZHJ104 R87 RK3062 Chip R. MCR03EZHJ104 R88 RK3062 Chip R. MCR03EZHJ104 R88 RK3062 Chip R. MCR03EZHJ104 R89 RH0142 Trim.Pot MCR03EZHJ104 RW122HXBRN103 Chip R. MCR03EZHJ104 RW122HXBRN103 Chip R. MCR03EZHJ104 RW122HXBRN103 RW2 RH0142 Trim.Pot MVR22HXBRN103 RW2 UX1253 Connector WIRE TNC XX1 XQ0124 Xtal AT-49 7.9872MHZ UP0402 PCB EJ41U (TNC ) 0.125 FF0033 VELCRO A FG0040 Cushion TZ0024 Insulator LITHIUM BATT. TZ0056 Insulator SILICON 49U					1
R83 RK3074 Chip R. MCR03EZHJ105 R84 RK3050 Chip R. MCR03EZHJ103 R85 RK3046 Chip R. MCR03EZHJ103 R87 RK3062 Chip R. MCR03EZHJ104 R88 RK3062 Chip R. MCR03EZHJ104 VR1 RH0142 Trim.Pot MVR22HXBRN103 VR2 RH0142 Trim.Pot MVR22HXBRN103 W2 UX1253 Connector WIRE TNC X1 XQ0124 Xtal AT-49 7.9872MHZ UP0402 PCB EJ41U (TNC ) 0.125 FF0033 VELCRO A FG0040 Cushion TZ0024 Insulator LITHIUM BATT. TZ0056 Insulator SILICON 49U			l '		1
R84         RK3050         Chip R.         MCR03EZHJ103           R85         RK3046         Chip R.         MCR03EZHJ104           R87         RK3062         Chip R.         MCR03EZHJ104           R88         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           VW2         UX1253         Connector         WIRE TNC           X1         XQQ124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.125           FF0033         VELCRO         A         C           FG0040         Cushion         Z           TZ0024         Insulator         LITHIUM BATT.           TZ0056         Insulator         SILICON 49U					1
R85         RK3046         Chip R.         MCR03EZHJ472           R87         RK3062         Chip R.         MCR03EZHJ104           R88         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           W2         UX1253         Connector         WIRE TNC           X1         XQ0124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.125           F60033         VELCRO         A           F60040         Cushion         2           TZ0024         Insulator         LITHIUM BATT.           TZ0056         Insulator         SILICON 49U					
R87 RK3062 Chip R. MCR03EZHJ104 R88 RK3062 Chip R. MCR03EZHJ104 VR1 RH0142 Trim.Pot MVR22HXBRN103 VR2 RH0142 Trim.Pot MVR22HXBRN103 W2 UX1263 Connector WIRE TNC X1 XQ0124 Xtal AT-49 7.9872MHZ UP0402 PCB EJ41U (TNC ) 0.128 FF0033 VELCRO A FG0040 Cushion TZ0024 Insulator LITHIUM BATT. TZ0056 Insulator SILICON 49U					1
R88         RK3062         Chip R.         MCR03EZHJ104           VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           W2         UX1253         Connector         WIRE TNC           X1         XQ0124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.126           FF0033         VELCRO         A           FG0040         Cushion         Z           TZ0024         Insulator         LITHIUM BATT.           TZ0056         Insulator         SILICON 49U	R87				1
VR1         RH0142         Trim.Pot         MVR22HXBRN103           VR2         RH0142         Trim.Pot         MVR22HXBRN103           W2         UX1253         Connector         WIRE TNC           X1         XQ0124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.125           FF0033         VELCRO         A           FG0040         Cushion         2           TZ0024         Insulator         LITHIUM BATT.           TZ0056         Insulator         SILICON 49U	R88				1
VR2         RH0142         Trim.Pot         MVR22HXBRN103           W2         UX1263         Connector         WIRE TNC           X1         XQ0124         Xtal         AT-49 7.9872MHZ           UP0402         PCB         EJ41U (TNC )         0.125           FF0033         VELCRO         A           FG0040         Cushion         2           TZ0024         Insulator         LITHIUM BATT.           TZ0056         Insulator         SILICON 49U	VR1				1
X1 XQ0124 Xtal AT-49 7.9872MHZ UP0402 PCB EJ41U (TNC ) 0.128 FF0033 VELCRO A FG0040 Cushion TZ0024 Insulator LITHIUM BATT. TZ0056 Insulator SILICON 49U	VR2				1
UP0402 PCB EJ41U (TNC ) 0.128 FF0033 VELCRO A FG0040 Cushion TZ0024 Insulator LITHIUM BATT. TZ0056 Insulator SILICON 49U	W2		Connector	WIRE TNC	1
FF0033 VELCRO A FG0040 Cushion 2 TZ0024 Insulator LITHIUM BATT. TZ0056 Insulator SILICON 49U	X1				1
FG0040         Cushion         2           TZ0024         Insulator         LITHIUM BATT.           TZ0056         Insulator         SILICON 49U					0.125
TZ0024 Insulator LITHIUM BATT. TZ0056 Insulator SILICON 49U				Α	1
TZ0056 Insulator SILICON 49U				[	2
					1
ти јаре ј#9110.12X1mm 23					1
		TZU131	ı ape	#911U 1ZX1MM	25

### TNC (EJ41U) Packing Parts

Ref.No.	Parts No.	Description	Parts Name	Qty
	FD0001	Floppy-Disc	(WIN2HD)	1
	FF0034	VELCRO	В	1
	FG0040	Cushion		1
	HK0487	Package	Item Carton EJ41U	1
	HP0029	Plastic bag	5X100X100	1
	HP0040	Plastic bag	8X130X200	1
	PF0061	SHEET	EJ41U	1
	PR0449	Label	EJ41U	1
	PS0354	Manual	INSTRUCTION EJ41U	1
	PS0355	Manual	INST-DISC EJ41U	1
	UZ0030	Plug	MP-013LC 3.5mm Plug	1

### **DR-135 ADJUSTMENT**

### 1) Adjustment Spot

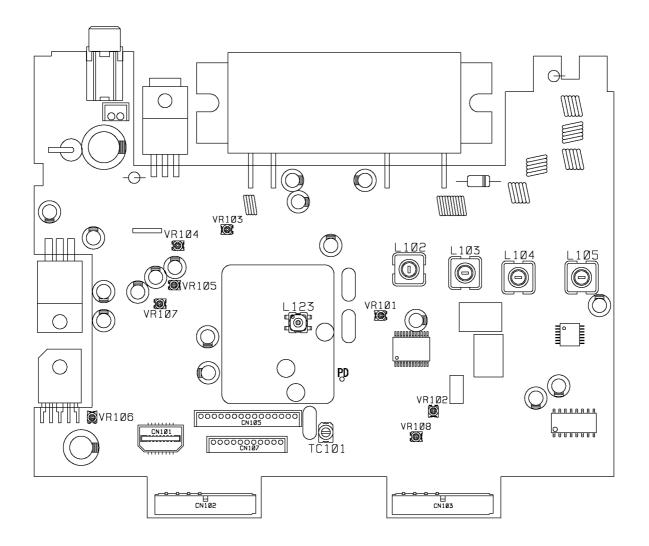
Power Supply Voltage 13.8 V

Output of SSG is all EMF indication

If without instruction, WIDE mode

If without instruction, SSG output is MOD 1KHz WIDE DEV 3.5KHz/DEV, NARROW DEV 1.75KHz/DEV Standard Modulation is also based above.

Speaker load is  $8\Omega$  and Output is  $50\sim100$  mV.



Attention: Don't set the variable resistor into its open position.

### 2) VCO and RX Adjustment Specification

ITEM	CONDITION	UNIT	ADJ.SPOT	ADJUSTING METHOD
Adjustment	145.90MHz	MAIN	TC101	Adjust so that Tx Frequency
Frequency	TX			becomes within 145.90MHz±100Hz
VCO	136.00MHz	MAIN	L123	Adjust so that PD voltage becomes
Adjustment	RX			1.5V
VCO	173.99MHz	MAIN		Confirm if PD voltage becomes less
Confirmation	RX			than 7.3 V
Rx Signal	146.05MHz	MAIN	L105, L104	Repeatedly adjust so that the Rx
Sensitivity			L103, L102	sensitivity becomes in maximum.
Adjustment				Confirm:
	136.05MHz			At -7dBu SINAD more than 12dB
	146.05MHz			At -8dBu SINAD more than 12dB
	173.95MHz			At -6dBu SINAD more than 12dB
Squelch	146.05MHz	MAIN	VR101	Adjust so that the squelch stops at
Adjustment	SSG OFF			perfectly close location
	Indication 01			
S Meter	146.05MHz	MAIN	VR102	Adjust so that all the indicator
Adjustment	SSG20dBu 1KHz			appears
	3.5KHz/DEV			

### 3) Tx Adjustment Specification

ITEM	CONDITION	UNIT	ADJ.SPOT	ADJUSTING METHOD
HI POWER	146.00MHz	MAIN	VR103	Adjust to 50.0±1.0W
Adjustment	HI POWER	IVIZIIN	1 11100	Adjust to 50.011.000
MID POWER	146.00MHz	MAIN	VR104	Adjust to 10.0±1.0W
Adjustment	MID POWER	1417 (114	•••••	/ Kajast to 15.511.511
LOW POWER	146.00MHz	MAIN		Confirm if it becomes 4.0 ±1.0W
Confirmation	LOW POWER			
Maximum	146.00MHz	MAIN	VR107	4.5±0.1KHz/DEV
Deviation	MOD			
Adjustment	1KHz40mVemf			
-	WIDE			
Maximum	146.00MHz	MAIN	VR105	2.2±0.1KHz/DEV
Deviation	MOD			
Adjustment	1KHz40mVemf			
	NARROW			
Mic Gain	146.00MHz	MAIN	VR106	3.0±0.1KHz/DEV
Adjustment	MOD			
	1KHz4mVemf			
07000	WIDE	BAAINI		000,00011 (DE)/ 01/11 1 DE ON
CTCSS	146.00MHz	MAIN		800±200Hz/DEV 3KHz LPF ON
Modulation   Level	88.5Hz			
Confirmation				
DCS	146.00MHz	MAIN	VR108	800±50Hz/DEV 3KHz LPF ON
Modulation	255 Code	IVIZALIA	VICTOO	000100112/BE V 31(112 E1 1 01V
Level	200 0000			
Adjustment				
1750Hz	146.00MHz	MAIN		3.0±0.5KHz/DEV
Modulation	1750Hz			
Level				
Confirmation				
DTMF	146.00MHz	MAIN		3.0±0.5KHz/DEV
Modulation	DTMF①			
Level	Press the V/M			
Confirmation	key during TX			

### 4) Rx Test Specification

RX Sensitivity					
146.05MHz	TEST ITEM	CONDITION	ADJ STANDARD	TEST STANDARD	NOTE
173.95MHz	RX Sensitivity				12dBSINAD
146.05MHz					
NARROW   135.05MHz   Less than 9dBu   Less than 10dBu   AM 10dB S/N		173.95MHz	Less than -6dBu	Less than -5dBu	
135.05MHz		146.05MHz	Less than -8dBu	Less than -7dBu	
RX Distortion		NARROW			
NARROW		135.05MHz	Less than 9dBu	Less than 10dBu	AM 10dB S/N
RX S/N	RX Distortion	WIDE	Less than 4%	Less than 5%	SSG OUT PUT 30dBu
NARROW More than 34dB More than 32dB 0.3~3KHzBPF OFF Squelch Squelch Open Squelch Open SSG Output -10dBu Sensitivity Indication 02 Squelch Close Squelch Close SSG Output OFF S Meter 146.05MHz All appears at 20dBu 25dBu 25d		NARROW			
Squelch Sensitivity Indication 02 Squelch Open Squelch Op	RX S/N	WIDE	More than 40dB	More than 38dB	SSG OUT PUT 30dBu
Sensitivity   Indication 02   Squelch Close   Squelch Close   SSG Output OFF		NARROW	More than 34dB	More than 32dB	0.3~3KHzBPF OFF
S Meter         146.05MHz 1KHz 3.5KHz/DEV         All appears at 20dBu         All appears at 25dBu         Decrease SSG level and decrease S Meter level           AF Output         146.05MHz         More than 2W         More than 2W         SSG Output 30dBu           CTCSS Sensitivity         WIDE         Openat 500Hz/DEV         Open at 250Hz/DEV         SSG Output 0dBu 88.5Hz           DCS Sensitivity         WIDE         Open at 250Hz/DEV         Open at 250Hz/DEV         250Hz/DEV           Dens when Test Equipment is in Tx         Equipment is in Tx         Opens when Test Equipment is in Tx         255 code           Drain Current         146.05MHz         Less than 0.65A         Less than 10mA         Power Off           Current         146.05MHz         Don't occur         Don't occur         SSG Output 60dBu	Squelch	146.05MHz	Squelch Open	Squelch Open	SSG Output -10dBu
1KHz 3.5KHz/DEV         20dBu         25dBu         and decrease S Meter level           AF Output         146.05MHz         More than 2W         More than 2W         SSG Output 30dBu           CTCSS Sensitivity         WIDE         Openat 500Hz/DEV         Open at 250Hz/DEV         SSG Output 0dBu 88.5Hz           DCS Sensitivity         WIDE         Open at 250Hz/DEV         Open at 250Hz/DEV         255 code           DCS Sensitivity         WIDE         Opens when Test Equipment is in Tx         Equipment is in Tx         255 code           NARROW         Opens when Test Equipment is in Tx         Equipment is in Tx         255 code           Drain Current         146.05MHz         Less than 0.65A         Less than 10mA         Power Off           Current         146.05MHz         Less than 10mA         Less than 10mA         Power Off           Current         146.05MHz         Don't occur         Don't occur         SSG Output 60dBu	Sensitivity	Indication 02	Squelch Close	Squelch Close	SSG Output OFF
3.5KHz/DEV	S Meter	146.05MHz	All appears at	All appears at	Decrease SSG level
AF Output         146.05MHz         More than 2W         More than 2W         SSG Output 30dBu           CTCSS         WIDE         Openat 500Hz/DEV 500Hz/DEV         SSG Output 0dBu 88.5Hz           Sensitivity         NARROW         Open at 250Hz/DEV         250Hz/DEV           DCS Sensitivity         WIDE         Opens when Test Equipment is in Tx         Equipment is in Tx           NARROW         Opens when Test Equipment is in Tx         Opens when Test Equipment is in Tx         255 code           Drain Current         146.05MHz         Less than 0.65A         Less than 0.65A         MAX VR           Power Off Current         146.05MHz         Less than 10mA         Less than 10mA         Power Off           Howling         146.05MHz         Don't occur         Don't occur         SSG Output 60dBu		1KHz	20dBu	25dBu	and decrease S Meter
CTCSS         WIDE         Openat 500Hz/DEV 500Hz/DEV 88.5Hz         SSG Output 0dBu 88.5Hz           NARROW         Open at 250Hz/DEV 250Hz/DEV         Open at 250Hz/DEV         250Hz/DEV           DCS Sensitivity         WIDE         Opens when Test Equipment is in Tx         Opens when Test Equipment is in Tx         255 code           NARROW         Opens when Test Equipment is in Tx         Opens when Test Equipment is in Tx         255 code           Drain Current         146.05MHz         Less than 0.65A         Less than 0.65A         MAX VR           Power Off Current         146.05MHz         Less than 10mA Less than 10mA Less than 10mA         Power Off Opens When Test Equipment is in Tx         Power Off Opens When Test Equipment is in Tx         SSG Output 60dBu		3.5KHz/DEV			level
Sensitivity	AF Output	146.05MHz	More than 2W	More than 2W	SSG Output 30dBu
NARROW   Open at 250Hz/DEV   250Hz/DEV	CTCSS	WIDE	Openat	Open at	SSG Output 0dBu
DCS Sensitivity   WIDE	Sensitivity		500Hz/DEV	500Hz/DEV	88.5Hz
DCS Sensitivity  WIDE  Opens when Test Equipment is in Tx  NARROW  Opens when Test Equipment is in Tx  Drain Current  146.05MHz  Less than 0.65A  Less than 0.65A  MAX VR  Power Off Current  Howling  146.05MHz  Don't occur  Don't occur  SSG Output 60dBu		NARROW	Open at	Open at	
Equipment is in Tx  NARROW Opens when Test Equipment is in Tx  Opens when Test Equipment is in Tx  Drain Current  Drain Current  146.05MHz Less than 0.65A Less than 0.65A Less than 10mA Current  Howling  Less than 10mA Less than 10mA Don't occur Don't occur  SSG Output 60dBu			250Hz/DEV	250Hz/DEV	
Tx Tx Tx  NARROW Opens when Test Equipment is in Tx  Drain Current 146.05MHz Less than 0.65A Less than 0.65A MAX VR  Power Off Current Current Howling 146.05MHz Don't occur Don't occur SSG Output 60dBu	DCS Sensitivity	WIDE	Opens when Test	Opens when Test	255 code
NARROW Opens when Test Equipment is in Tx  Drain Current  146.05MHz Less than 0.65A  Less than 0.65A  Less than 0.65A  MAX VR  Power Off Current Howling  146.05MHz Don't occur  Don't occur  Opens when Test Equipment is in Tx  Less than 0.65A  Less than 0.65A  Don't occur  Don't occur  SSG Output 60dBu			Equipment is in	Equipment is in	
Equipment is in Tx  Drain Current  146.05MHz  Less than 0.65A  Less than 0.65A  MAX VR  Power Off Current  Howling  146.05MHz  Don't occur  Don't occur  SSG Output 60dBu			Tx	Tx	
Tx Tx  Drain Current 146.05MHz Less than 0.65A Less than 0.65A MAX VR  Power Off Current Howling 146.05MHz Don't occur Don't occur SSG Output 60dBu		NARROW		Opens when Test	255 code
Drain Current     146.05MHz     Less than 0.65A     Less than 0.65A     MAX VR       Power Off Current     146.05MHz     Less than 10mA     Less than 10mA     Power Off       Howling     146.05MHz     Don't occur     Don't occur     SSG Output 60dBu			Equipment is in	Equipment is in	
Power Off Current			1.7.		
Current Don't occur Don't occur SSG Output 60dBu	Drain Current	146.05MHz	Less than 0.65A	Less than 0.65A	MAX VR
Howling 146.05MHz Don't occur Don't occur SSG Output 60dBu		146.05MHz	Less than 10mA	Less than 10mA	Power Off
MOD OFF MAX VR	Howling	146.05MHz	Don't occur	Don't occur	
					MOD OFF MAX VR

### 5) Tx Test Specification

TEST ITEM	CONDITION	ADJ STANDARD	TEST STANDARD	NOTE
TX Output HI POWER	136.00MHz 144.00MHz	More than 33W	More than 33W 50±3W	←TA,TAG ONLY
	146.00MHz	50±1W	50±3W	
	148.00MHz		50±3W	+T,TG ONLY
	173.99MHz	More than 33W	More than 33W	←TA,TAG ONLY
TX Output MID POWER	146.00MHz	10±1W	10 ±2W	
TX Output LOW POWER	146.00MHz	4±1W	3~6W	
Drain Current	146.00MHz	Less than 10A	Less than 11A	
Frequency Deviation	146.00MHz	Within ±0.3KHz	Within±0.5KHz	
Spurious	136.00MHz	More than 60dB	More than 55dB ←	M and L standard
	144.00MHz	More than 65dB	More than 60dB	power is also the
	146.00MHz	More than 65dB	More than 60dB	same as of H power
	148.00MHz	More than 65dB	More than 60dB	level
	173.99MHz	More than 60dB	More than 55dB→	
			TA, TAG ONLY —	
Modulation Level	WIDE	3.0±0.1KHz/DEV	3.0±0.2KHz/DEV	MIC IN 4mVemf
	146.00MHz	4.5±0.1KHz/DEV	4.5±0.2KHz/DEV	MIC IN 40mVemf
	NARROW 146.00MHz	2.2±0.1KHz/DEV	2.2±0.2KHz/DEV	MIC IN 40mVemf
CTCSS Modulation Level	WIDE 146.00MHz	800±200Hz/DEV	800±200Hz/DEV	88.5Hz 3KHz LPF ON
DCS Modulation	WIDE	800±200Hz/DEV	800±200Hz/DEV	Code 255
	146.00MHz			3KHz LPF ON
	NARROW	450±100Hz/DEV	450±100Hz/DEV	Code 255
	146.00MHz			3KHz LPF ON
1750Hz	WIDE	3.0±0.5KHz/DEV	3.0±0.5KHz/DEV	
Modulation Level	146.00MHz			
DTMF Modulation Level	WIDE 146.00MHz	3.0±0.5KHz/DEV	3.0±0.5KHz/DE V	Press the V/M key during TX
Modulation	146.00MHz	Less than 3%	Less than 4%	
TX S/N	WIDE	More than 40dB	More than 38dB	03 ~ 3KH7 BPF ON
	NADBOW/	More than 34dB	More than 32dB	50
	NAPACVV	More triari 34au	More urari ozdu	

### **DR-235 ADJUSTMENT**

### 1) Adjustment Spot

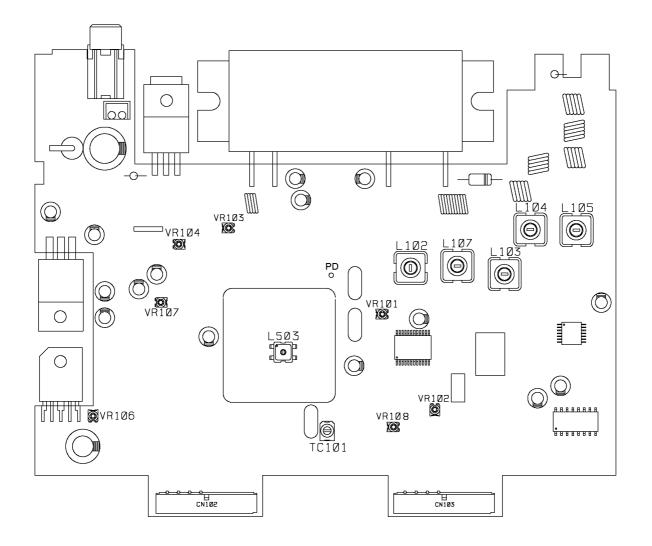
Power Supply Voltage 13.8 V

Output of SSG is all EMF indication

If without instruction, WIDE mode

If without instruction, SSG output is MOD 1KHz WIDE DEV 3.5KHz/DEV, NARROW DEV 1.75KHz/DEV Standard Modulation is also based above.

Speaker load is  $8\Omega$  and Output is  $50\sim100$  mV.



Attention: Don't set the variable resistor into its open position.

### 2) VCO and RX Adjustment Specification

ITEM	CONDITION	UNIT	ADJ.SPOT	ADJUSTING METHOD
Adjustment	224.90MHz	MAIN	TC101	Adjust so that Tx Frequency
Frequency	TX			becomes within 224.90MHz±100Hz
VCO	225.00MHz	vco	L503	Adjust so that PD voltage becomes
Adjustment	RX			2.2V
VCO	224.99MHz	vco		Confirm if PD voltage becomes less
Confirmation	TX			than 6.2 V
Rx Signal	223.50MHz	MAIN	L105, L104	Repeatedly adjust so that the Rx
Sensitivity			L103, L107	sensitivity becomes in maximum.
Adjustment			L102	Confirm:
	216.05MHz			At -7dBu SINAD more than 12dB
	223.50MHz			At -8dBu SINAD more than 12dB
	250.05MHz			At -3dBu SINAD more than 12dB
Squelch	223.50MHz	MAIN	VR101	Adjust so that the squelch stops at
Adjustment	SSG OFF			perfectly close location
	Indication 01			
S Meter	223.50MHz	MAIN	VR102	Adjust so that all the indicator
Adjustment	SSG20dBu 1KHz			appears
	3.5KHz/DEV			

### 3) Tx Adjustment Specification

ITEM	CONDITION	UNIT	ADJ.SPOT	ADJUSTING METHOD
HI POWER	223.50MHz	MAIN	VR103	Adjust to 25.0±1.0W
Adjustment	HI POWER		******	, tajast to 25.52 1.511
MID POWER	223.50MHz	MAIN	VR104	Adjust to 10.0±1.0W
Adjustment	MID POWER			
LOW POWER	223.50MHz	MAIN		Confirm if it becomes 4.5±1.0W
Confirmation	LOW POWER			
Maximum	223.50MHz	MAIN	VR107	4.5±0.1KHz/DEV
Deviation	MOD			
Adjustment	1KHz40mVemf			
	WIDE			
Maximum	223.50MHz	MAIN	VR105	2.2±0.1KHz/DEV
Deviation	MOD 1KHz40mVemf			
Adjustment	NARROW			
Mic Gain	223.50MHz	MAIN	VR106	3.0±0.1KHz/DEV
Adjustment	MOD	IVIZ (II V	*100	0.010.11(12/BEV
/ tajaoanone	1KHz4mVemf			
	WIDE			
CTCSS	223.50MHz	MAIN		800±300Hz/DEV 3KHz LPF ON
Modulation	88.5Hz			
Level				
Confirmation				
DCS	223.50MHz	MAIN	VR108	800±100Hz/DEV 3KHz LPF ON
Modulation	255 Code			
Level				
Adjustment 1750Hz	223.50MHz	MAIN		3.0±0.5KHz/DEV
Modulation	1750Hz	INIMIN		3.0±0.3K  12/DE V
Level	1700112			
Confirmation				
DTMF	223.50MHz	MAIN		3.0±0.5KHz/DEV
Modulation	DTMF①			
Level	Press the V/M			
Confirmation	key during TX			

### 4) Rx Test Specification

	CONDITION 216.05MHz	ADJ STANDARD	TEST STANDARD	NOTE
		Less than -7dBu	Less than -6dBu	12dBSINAD
1 1 2	223.50MHz	Less than -8dBu	Less than -7dBu	IZGDONNAD
1	250.05MHz	Less than -3dBu	Less than -2dBu	
<u> </u>	223.50MHz	Less than -8dBu	Less than -7dBu	
I I	NARROW	Less than -oubu	Less than -7 dbd	
	223.50MHz	Less than+6dBu	Less than +7dBu	AM 10dB S/N
	WIDE	Less than 4%	Less than 5%	SSG OUT PUT 30dBu
	NARROW			
L	WIDE	More than 40dB	More than 38dB	SSG OUT PUT 30dBu
<u> </u>	NARROW	More than 34dB	More than 32dB	0.3~3KHzBPF OFF
	223.50MHz	Squelch Open	Squelch Open	SSG Output -10dBu
Sensitivity I	Indication 02	Squelch Close	Squelch Close	SSG Output OFF
S Meter 2	223.50MHz	All appears at	All appears at	Decrease SSG level
1	1KHz	20dBu	25dBu	and decrease S Meter
3	3.5KHz/DEV			level
	223.50MHz	More than 2W	More than 2W	SSG Output 30dBu
CTCSS	WIDE	Open at	Open at	SSG Output 0dBu
Sensitivity		500Hz/DEV	500Hz/DEV	88.5Hz
1	NARROW	Open at	Open at	
		250Hz/DEV	250Hz/DEV	
DCS Sensitivity \	WIDE	Opens when Test	Opens when Test	255 code
		Equipment is in	Equipment is in	
		Tx	Tx	
	NARROW	Opens when Test	Opens when Test	255 code
		Equipment is in	Equipment is in	
		Tx	Tx	
Drain Current 2	223.50MHz	Less than 0.65A	Less than 0.65A	MAX VR
Power Off 2	223.50MHz	Less than 10mA	Less than 10mA	Power Off
Current				
Howling 2	223.50MHz	Don't occur	Don't occur	SSG Output 60dBu
				MOD OFF MAX VR

### 5) Tx Test Specification

TEST ITEM	CONDITION	ADJ STANDARD	TEST STANDARD	NOTE
TX Output	222.00MHz	25±1W	25±3W	
HI POWER	223.50MHz	25±1W	25±3W	
	224.99MHz	25±1W	25±3W	
TX Output	223.50MHz	10±1W	10±2W	
MID POWER				
TX Output	223.50MHz	4.5±1W	3~6W	
LOW POWER				
Drain Current	223.50MHz	Less than 7A	Less than 8A	
Frequency Deviation	223.50MHz	Within±0.5KHz	Within±0.7KHz	
Spurious	222.00MHz	More than 65dB	More than 60dB	M and L standard
	223.50MHz	More than 65dB	More than 60dB	power is also the
	224.99MHz	More than 65dB	More than 60dB	same as of H power
				level
Modulation	WIDE	3.0±0.1KHz/DEV	3.0±0.2KHz/DEV	MIC IN 4mVemf
Level	223.50MHz	4.5±0.1KHz/DEV	4.5±0.2KHz/DEV	MIC IN 40mVemf
	NARROW	2.2±0.1KHz/DEV	2.2±0.2KHz/DEV	MIC IN 40mVemf
	223.50MHz			
CTCSS	WIDE	800±200Hz/DEV	800±200Hz/DEV	88.5Hz
Modulation	223.50MHz			3KHz LPF ON
Level				
DCS	WIDE	800±100Hz/DEV	800±200Hz/DEV	Code 255
Modulation	223.50MHz			3KHz LPF ON
Level	NARROW	500±100Hz/DEV	450±100Hz/DEV	Code 255
	146.00MHz			3KHz LPF ON
1750Hz	WIDE	3.0±0.5KHz/DEV	3.0±0.5KHz/DEV	
Modulation	146.00MHz			
Level				
DTMF	WIDE	3.0±0.5KHz/DEV	3.0±0.5KHz/DEV	Press the V/M key
Modulation	146.00MHz			during TX
Level				
Modulation	146.00MHz	Less than 3%	Less than 4%	
Distortion				
TX S/N	WIDE	More than 40dB	More than 38dB	0.3~3KHz BPF ON
	NARROW	More than 34dB	More than 32dB	

### **DR-435 ADJUSTMENT**

### 1) Adjustment Spot

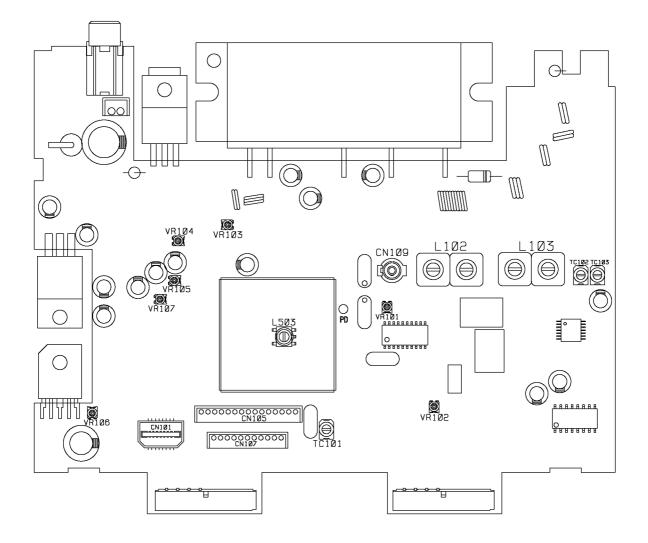
Power Supply Voltage 13.8 V

Output of SSG is all EMF indication

If without instruction, WIDE mode

If without instruction, SSG output is MOD 1KHz WIDE DEV 3.5KHz/DEV, NARROW DEV 1.75KHz/DEV Standard Modulation is also based above.

Speaker load is  $8\Omega$  and Output is  $50\sim100$  mV.



Attention: Don't set the variable resistor into its open position.

### 2) VCO and RX Adjustment Specification

ITEM	CONDITION	UNIT	ADJ.SPOT	ADJUSTING METHOD
Adjustment	439.00MHz	MAIN	TC101	Adjust so that Tx Frequency
Frequency	TX			becomes within 439.00MHz±100Hz
VCO	425.00MHz	VCO	L503	Adjust so that PD voltage becomes
Adjustment	RX			1.7V
VCO	511.95MHz	vco		Confirm if PD voltage becomes less
Confirmation	RX			than 9.0 V
Rx Signal	440.05MHz	MAIN	TC103	It is a tracking generator from an
Sensitivity			TC102	antenna connector30dBm is
Adjustment			L103, L102	inputted.And when CN109 is seen
				with a spectrum analyzer, by the
				maximum gain, it becomes as it is
				shown in the following figure, and
				appearance adjustment is carried
				out. 430.00M 450.00M
				450.00101 450.00101
				/ \
				/ \
	430.05MHz			At -7.5dBu SINAD more than 12dB
	440.05MHz			At -7.5dBu SINAD more than 12dB
	450.05MHz			At -7.5dBu SINAD more than 12dB
0 1 1		BAAINI	) /D4.04	
Squelch	440.05MHz	MAIN	VR101	Adjust so that the squelch stops at
Adjustment	SSG OFF			perfectly close location
	Indication 01		1 /5 / 50	
S Meter	440.05MHz	MAIN	VR102	Adjust so that all the indicator
Adjustment	SSG20dBu 1KHz			appears
	3.5KHz/DEV			

### 3) Tx Adjustment Specification

ITEM.	CONDITION	T.,,,,,,	45.1050T	45 000 45 700 5
ITEM	CONDITION	UNIT	ADJ.SPOT	ADJUSTING METHOD
HI POWER	440.00MHz	MAIN	VR103	Adjust to 35.0±1.0W
Adjustment	HI POWER			
MID POWER	440.00MHz	MAIN	VR104	Adjust to 10.0±1.0W
Adjustment	MID POWER			-
LOW POWER	440.00MHz	MAIN		Confirm if it becomes
Confirmation	LOW POWER			5.0±1.0VV
Maximum	440.00MHz	MAIN	VR107	4.5±0.1KHz/DEV
Deviation	MOD			
Adjustment	1KHz40mVemf			
	WIDE			
Maximum	440.00MHz	MAIN	VR105	2.2±0.1KHz/DEV
Deviation	MOD			
Adjustment	1KHz40mVemf			
	NARROW			
Mic Gain	440.00MHz	MAIN	VR106	3.0±0.1KHz/DEV
Adjustment	MOD			
	1KHz4mVemf			
CTCSS	WIDE 440.00MHz	MAIN		800±200Hz/DEV 3KHz LPF ON
Modulation	440.00MHz   88.5Hz	IMAIN		800±200HZ/DEV 3KHZ LPF ON
Level	00.302			
Confirmation				
DCS	440.00MHz	MAIN		800±200Hz/DEV 3KHz LPF ON
Modulation	255 Code	IVICIIN		0001200112/DEV 31(112 E1 1 O1)
Level	200 0000			
Confirmation				
1750Hz	440.00MHz	MAIN		3.0±0.5KHz/DEV
Modulation	1750Hz			
Level				
Confirmation				
DTMF	440.00MHz	MAIN		3.0±0.5KHz/DEV
Modulation	DTMF ①			
Level	Press the V/M			
Confirmation	key during TX			

### 4) Rx Test Specification

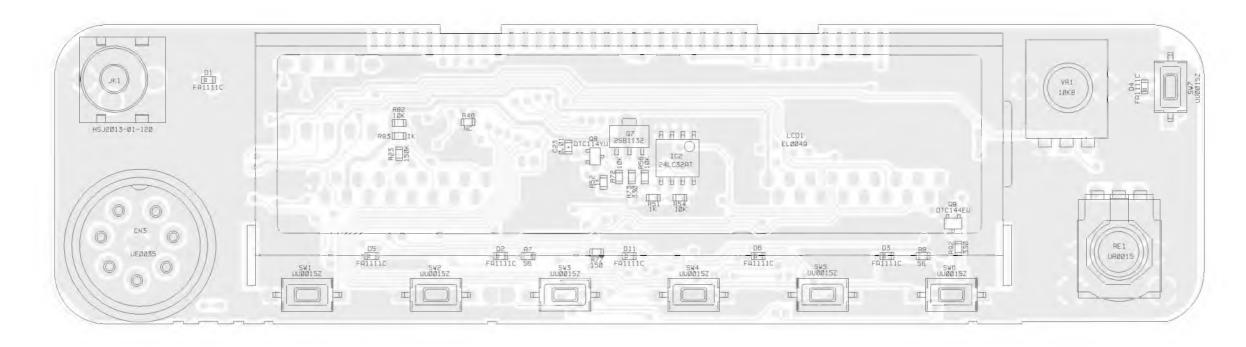
	CONDITION			NOTE
TEST ITEM	CONDITION	ADJ STANDARD	TEST STANDARD	NOTE
RX Sensitivity	350.05MHz	Less than -1dBu	Less than OdBu	12dBSINAD
	430.05MHz	Less than -7.5dBu	Less than-6.5dBu	
	440.05MHz	Less than-7.5dBu	Less than-6.5dBu	
	450.05MHz	Less than-7.5dBu	Less than-6.5dBu	
	511.95MHz	Less than +1dBu	Less than +2dBu	
	440.05MHz	Less than-7.5dBu	Less than-6.5dBu	
	NARROW			
RX Distortion	WIDE	Less than 4%	Less than 5%	SSG Output 40dBu
	NARROW			
RX S/N	WIDE	More than 40dB	More than 38dB	SSG Output 40dBu
	NARROW	More than 34dB	More than 32dB	0.3~3KHzBPF
				OFF
Squelch	440.05MHz	Squelch Open	Squelch Open	SSG Output -10dBu
Sensitivity	Indication 02	Squelch Close	Squelch Close	SSG Output OFF
S Meter	440.05MHz	All appears at	All appears at	Decrease SSG
- Mictor	1KHz	20dBu	25dBu	level and decrease
	3.5KHz/DEV			S Meter level
AF Output	440.05MHz	More than 2W	More than 2W	SSG Output 40dBu
CTCSS	WIDE	Open at	Open at	SSG Output 0dBu
Sensitivity	****	500Hz/DEV	500Hz/DEV	88.5Hz
Oerisitivity	NARROW	Open at	Open at	00.3112
	INAINIOVV	250Hz/DEV	250Hz/DEV	
DCS Sensitivity	WIDE	Opens when Test	Opens when Test	255 code
DCG Gensitivity	WIDE	Equipment is in Tx	Equipment is in Tx	255 code
	NARROW	Opens when Test	Opens when Test	255 code
		Equipment is in Tx	Equipment is in Tx	
Drain Current	440.05MHz	Less than 0.7A	Less than 0.7A	MAX VR
Power Off	440.05MHz	Less than 10mA	Less than 10mA	Power Off
Current				
Howling	440.05MHz	Don't occur	Don't occur	SSG Output 60dBu
	TP,TPG			MOD OFF MAX VR
	WIDE MODE			
	OTHER			
	NARROW			
	MODE			
		1		

### 5) Tx Test Specification

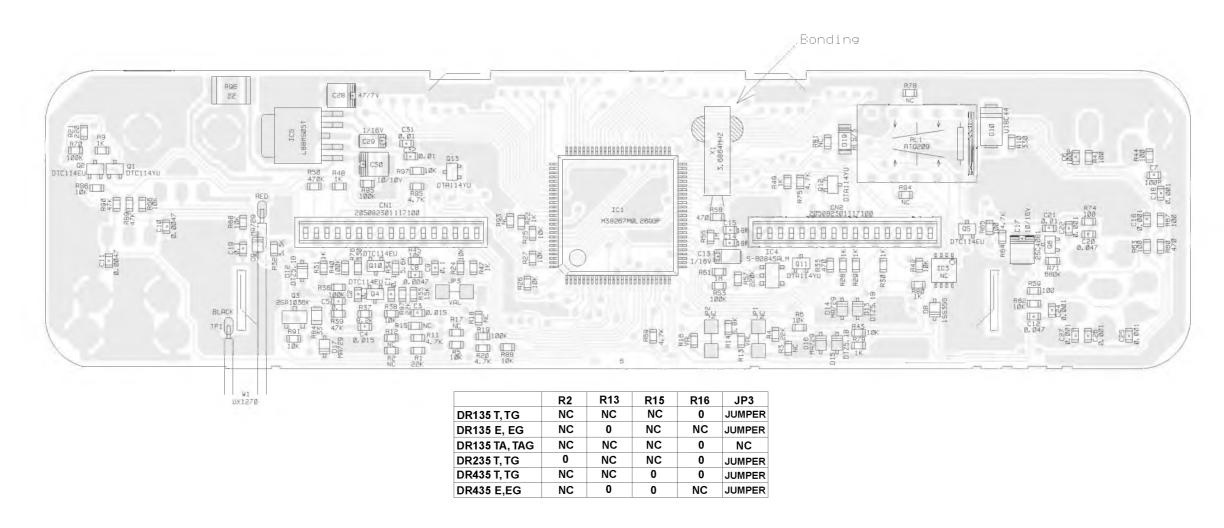
TEST ITEM	Locupition	I ABLOTANDADD	T TEOT OTANDADD	NOTE
TEST ITEM	CONDITION	ADJ STANDARD	TEST STANDARD	NOTE
TX Output	430.00MHz		35±3W	
HI POWER	440.00MHz	35±1W	35±3W	
	450.00MHz		35±3W	← T,TG ONLY
TX Output	440.00MHz	10±1W	10±2W	
MID POWER				
TX Output	440.00MHz	5±1W	5±2W	
LOW POWER	110.00.011		022**	
Drain Current	440.00MHz	Less than	Less than	
Diam Current	7-70.00M112	9A	10A	
Frequency	440.00MHz	Within ±0.5KHz	Within ±1.0KHz	
Deviation	440.00101112	VVIII III 10.5KI IZ	VVIUIIII 11.0KI 12	
Spurious	430.00MHz	More than 62dB	More than 60dB	M and L standard
Spurious	440.00MHz	More than 62dB	More than 60dB	power is also the
	450.00MHz	More than 62dB	More than 60dB	!
	450.00MHZ	Wore than 6205		same as of H power
			450MHz T,TG ONLY	level
Modulation	WIDE	3.0±0.1KHz/DEV	3.0±0.2KHz/DEV	MIC IN 4mVemf
Level	440.00MHz	4.5±0.1KHz/DEV	4.5±0.2KHz/DEV	MIC IN 40mVemf
Level	NARROW	2.2±0.1KHz/DEV	2.2±0.2KHz/DEV	MIC IN 40mVemf
	440.00MHz	2.2±0.1KHZ/DEV	2.2±0.2KHZ/DEV	MIC IN 40mvemi
CTCSS		800±200Hz/DEV	000+000H=/DE\/	00 511-
	WIDE	800±200HZ/DEV	800±200Hz/DEV	88.5Hz
Modulation	440.00MHz			3KHz LPF ON
Level				
DCS	WIDE	800±200Hz/DEV	800±200Hz/DEV	Code 255
Modulation	440.00MHz			3KHz LPF ON
Level	NARROW	450±100Hz/DEV	450±100Hz/DEV	Code 255
	440.00MHz			3KHz LPF ON
1750Hz	WIDE	3.0±0.5	3.0±0.5	
Modulation	440.00MHz	KHz/DEV	KHz/DEV	
Level				
DTMF	WIDE	3.0±0.5	3.0±0.5	Press the V/M key
Modulation	440.00MHz	KHz/DEV	KHz/DEV	during TX
Level				_
Modulation	440.00MHz	Less than 3%	Less than 4%	
Distortion				
TX S/N	WIDE	More than 40dB	More than 38dB	0.3~3KHz BPF
	NARROW	More than 34dB	More than 32dB	ON
	•		•	

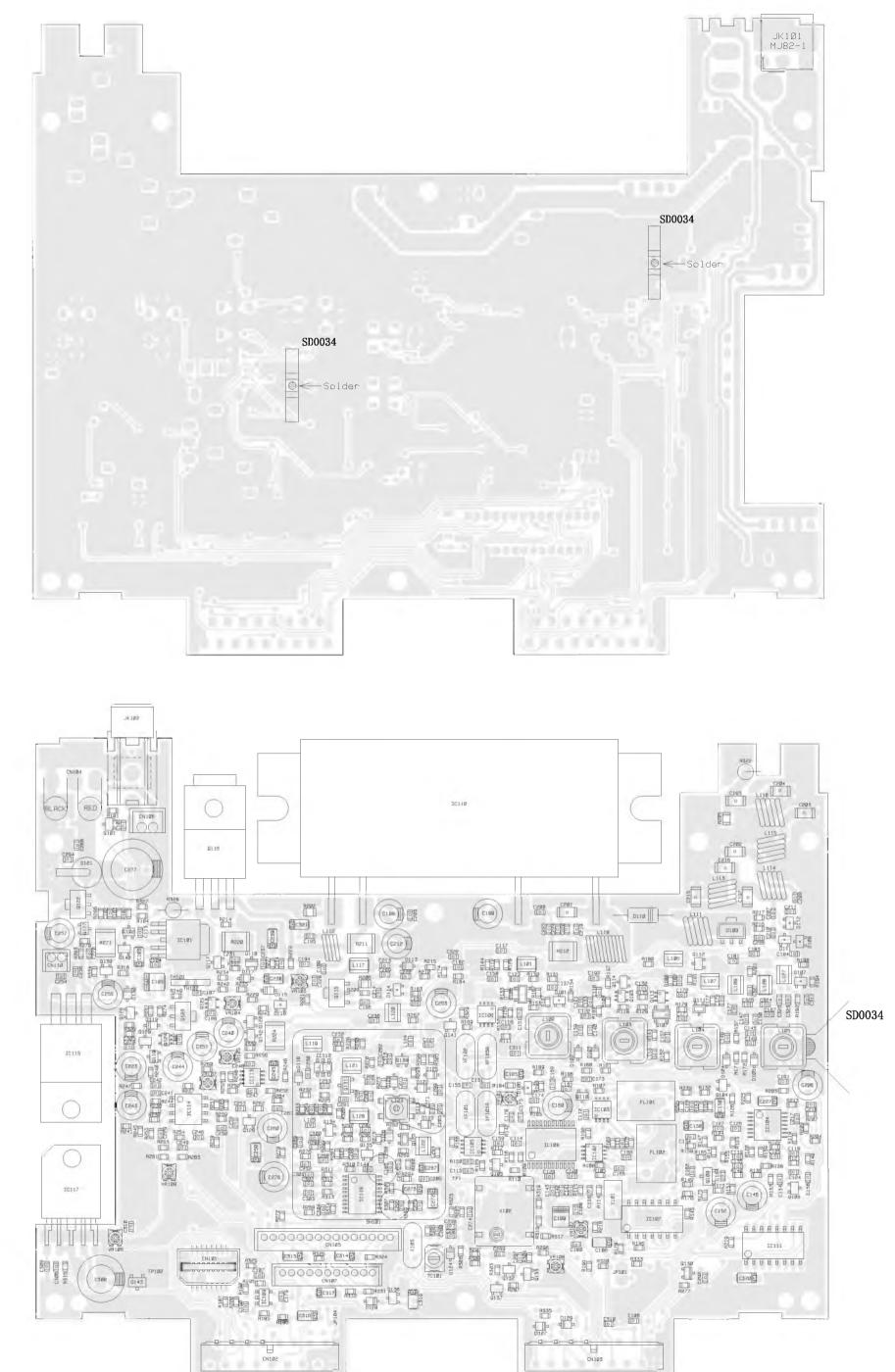
### **PC BOARD VIEW**

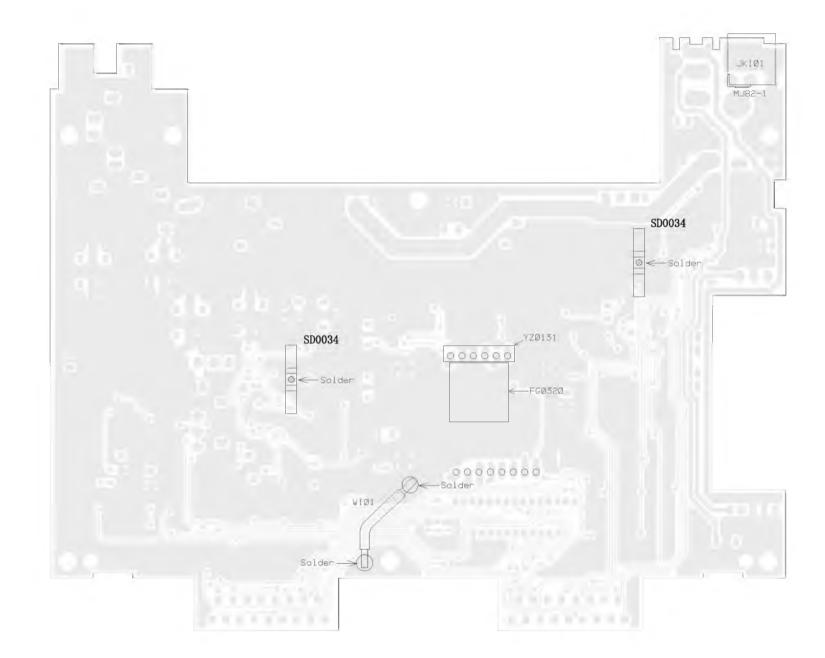
1) CPU Unit Side A DR-135 (UP 0400B) DR-235 (UP 0414) DR-435 (UP 0415)

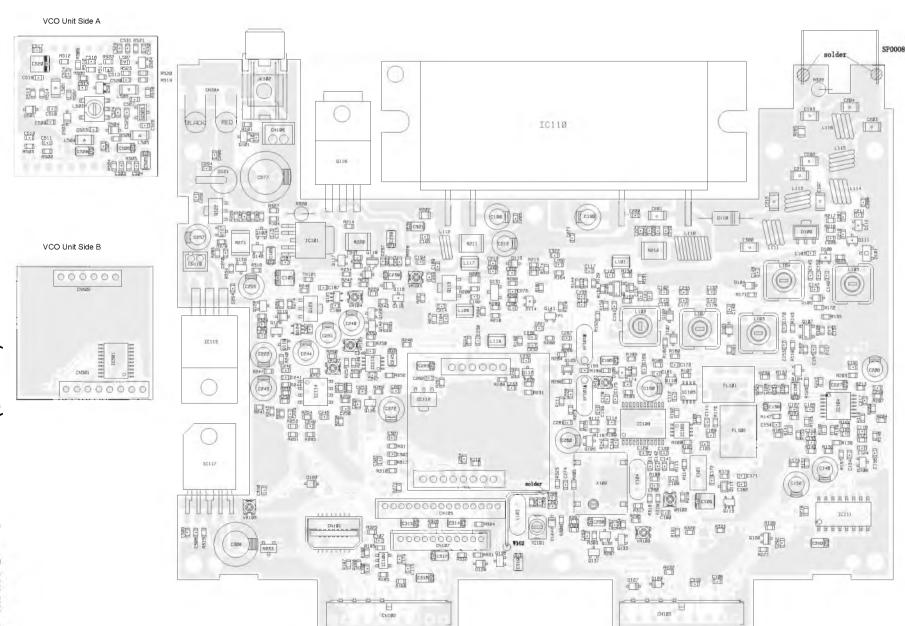


2) CPU Unit Side B DR-135 (UP 0400B) DR-235 (UP 0414) DR-435 (UP 0415)

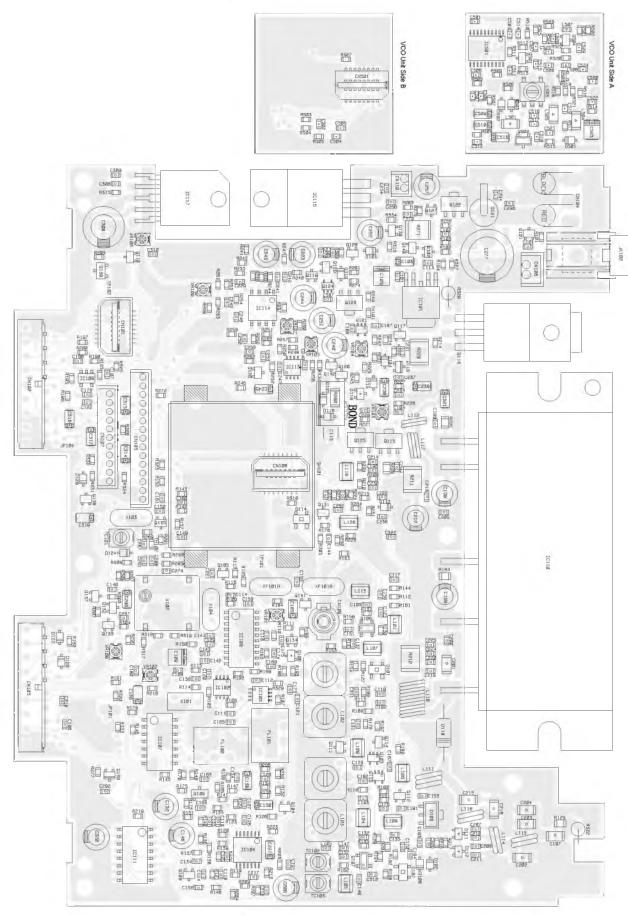




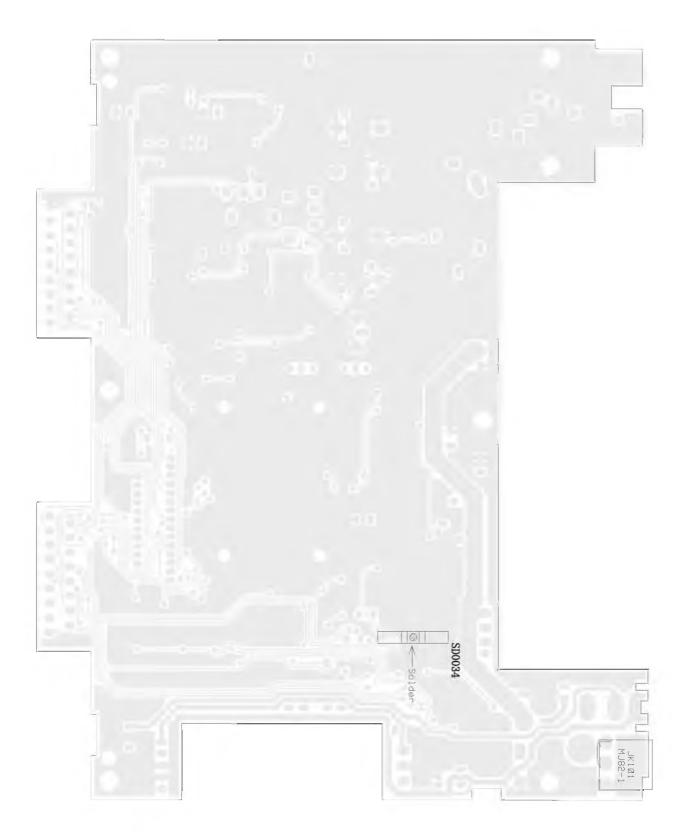




### 7) MAIN Unit Side A DR-435 (UP 0415)

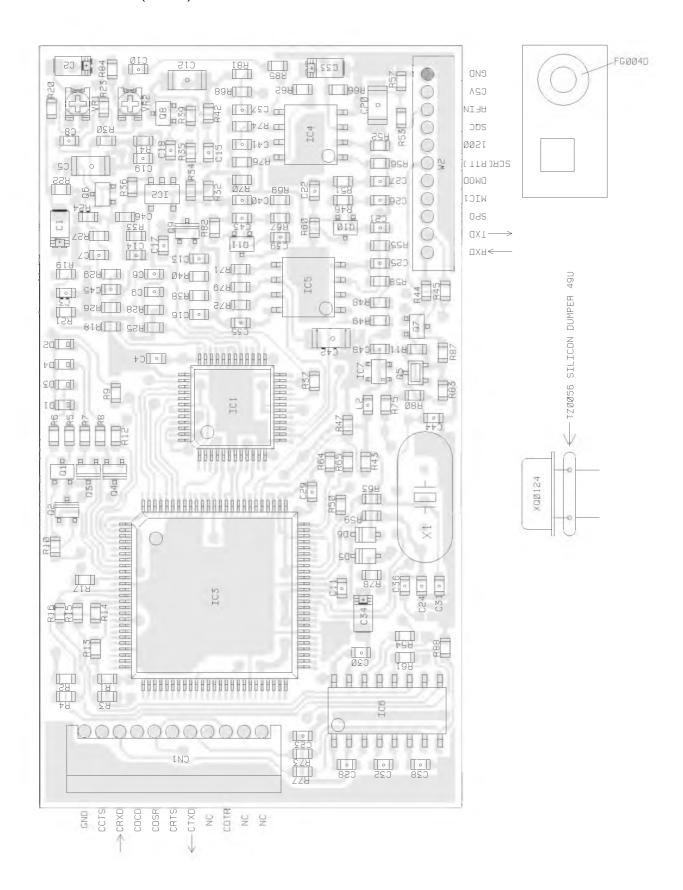


### 8) MAIN Unit Side B DR-435 (UP 0415)

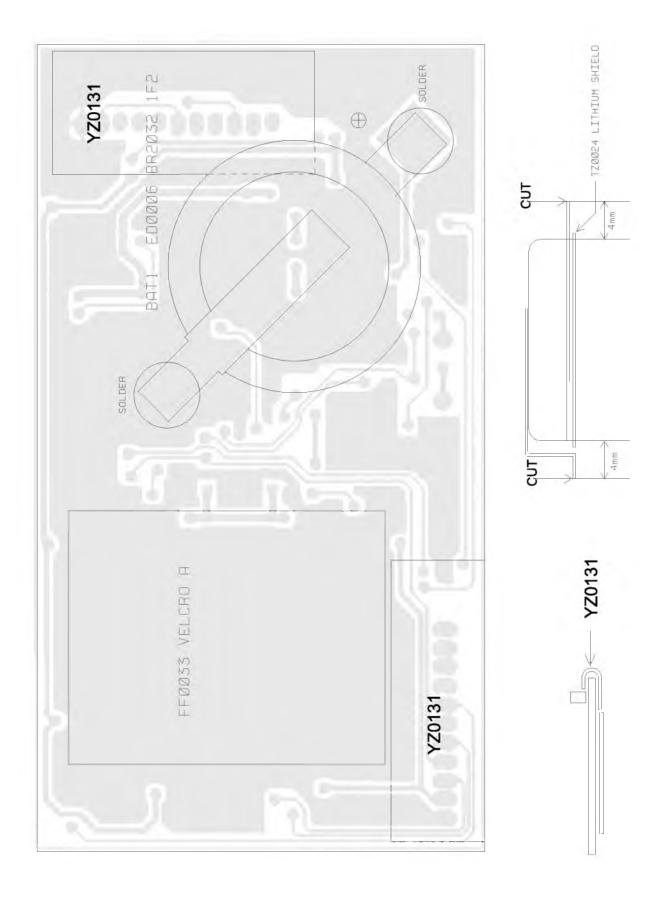


### 9) TNC Unit Side A (UP 0402) (DR-135TP only)

**OPTION unit (EJ41U)** 

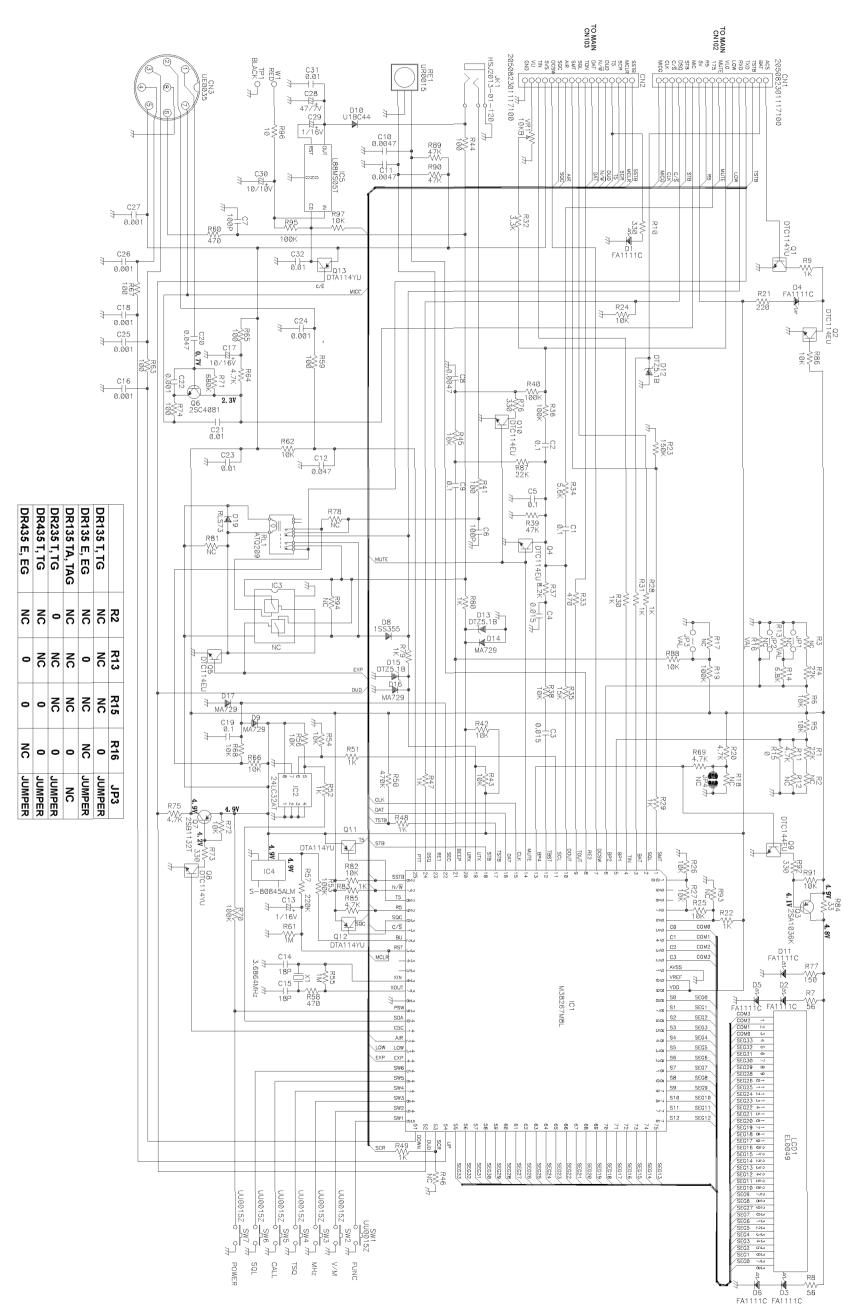


### 10) TNC Unit Side B (UP 0402) (DR-135TP only)

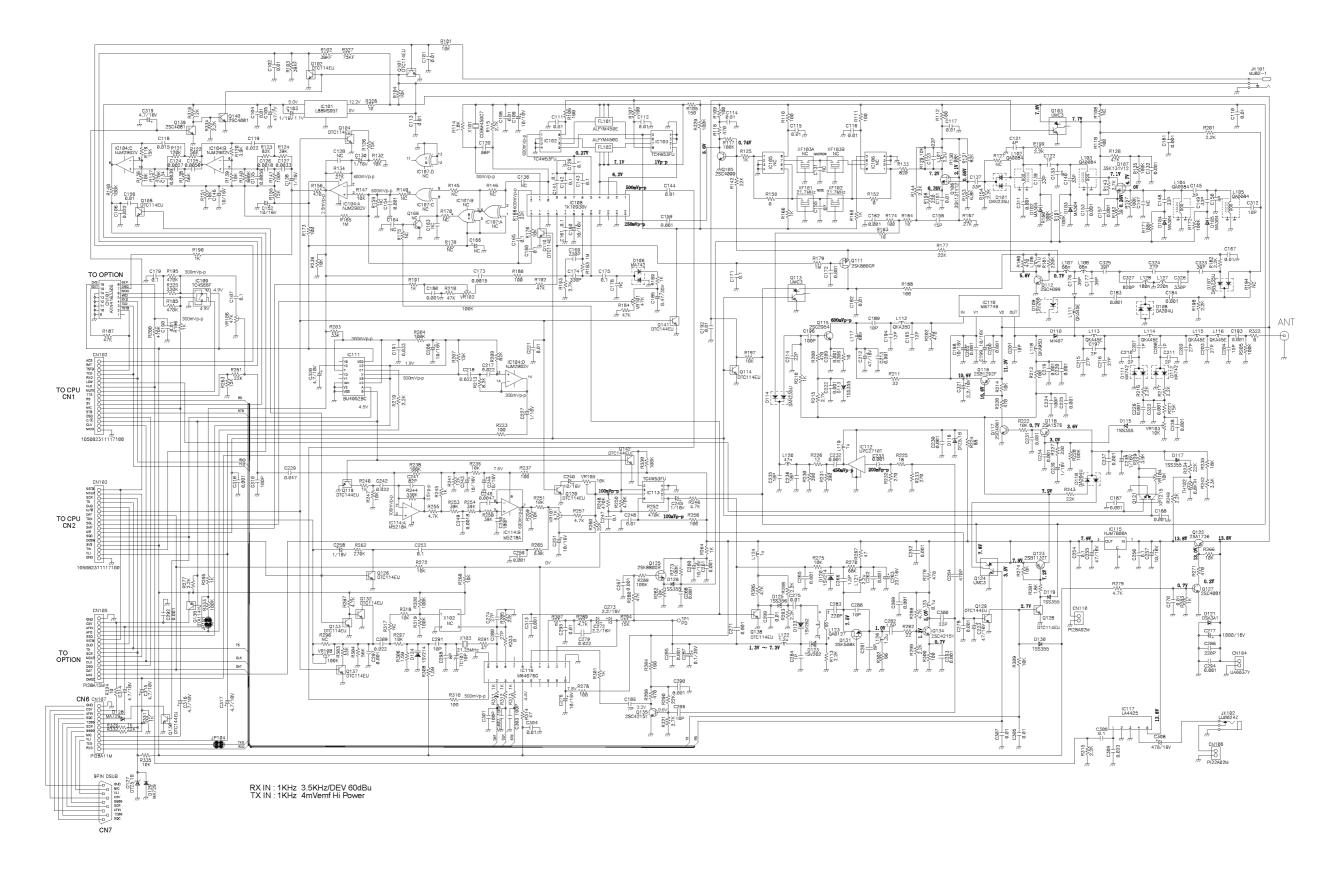


## SCHMATIC DIAGRAM

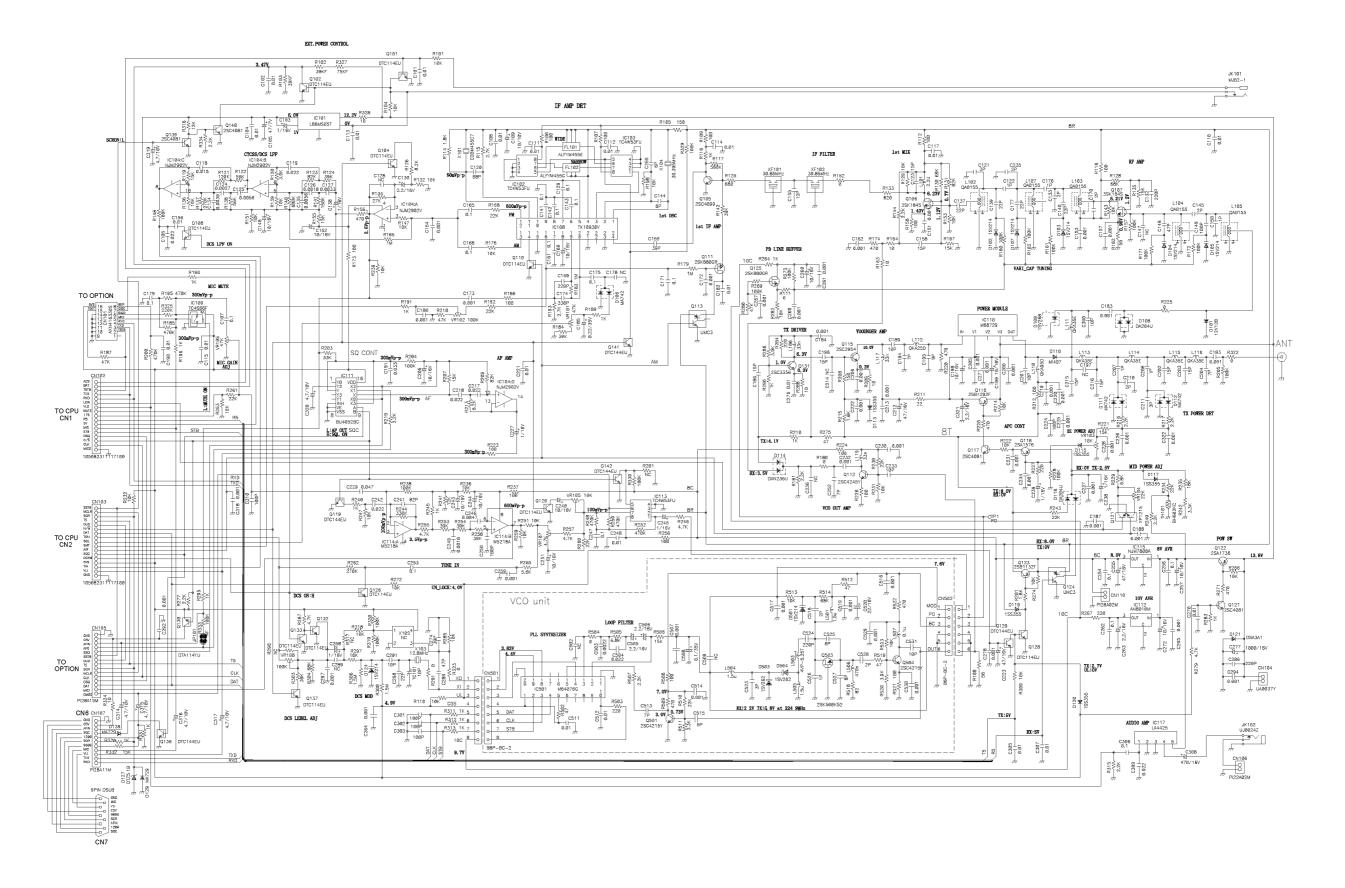
# 1) CPU Unit DR-135 / DR-235 / DR-435



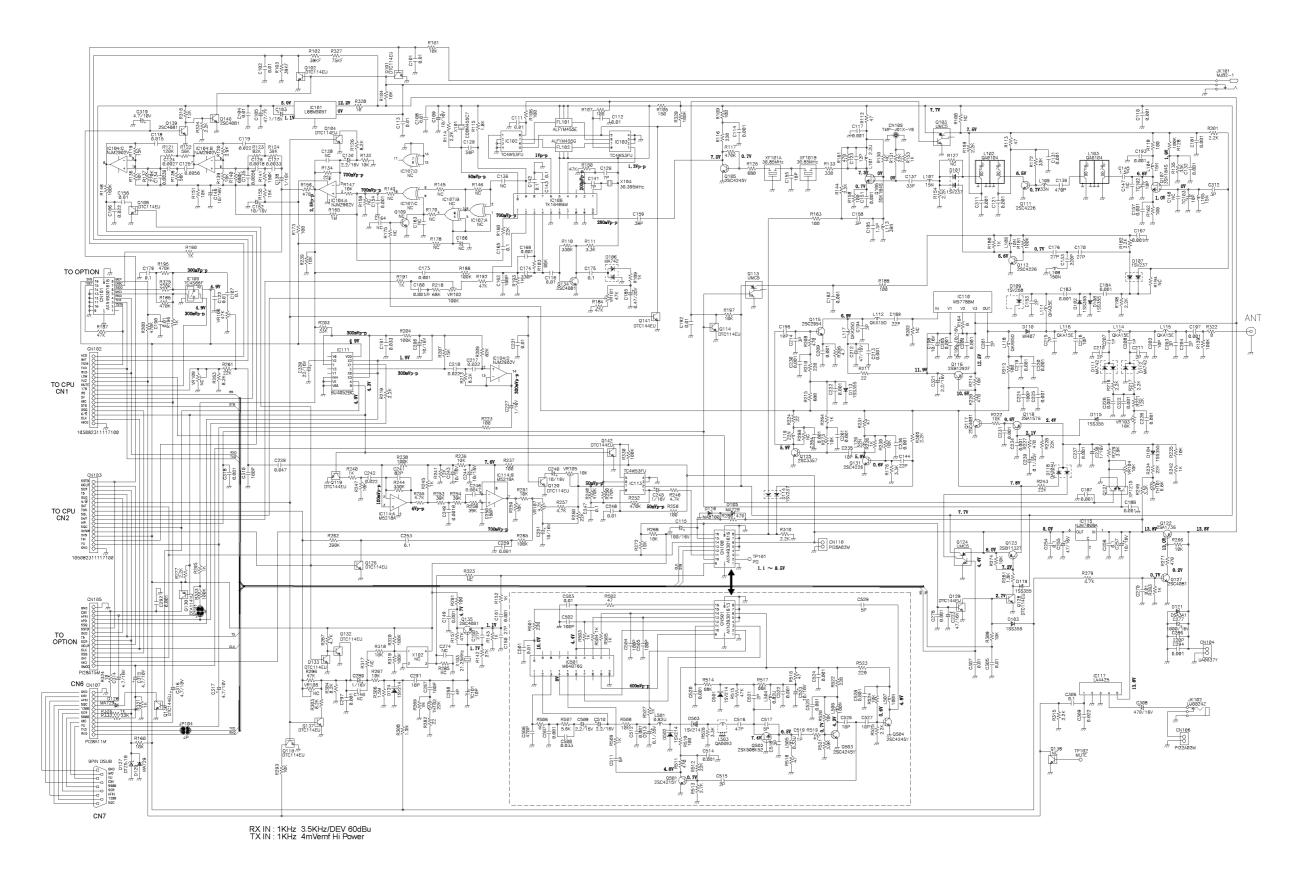
### 2) MAIN Unit DR-135



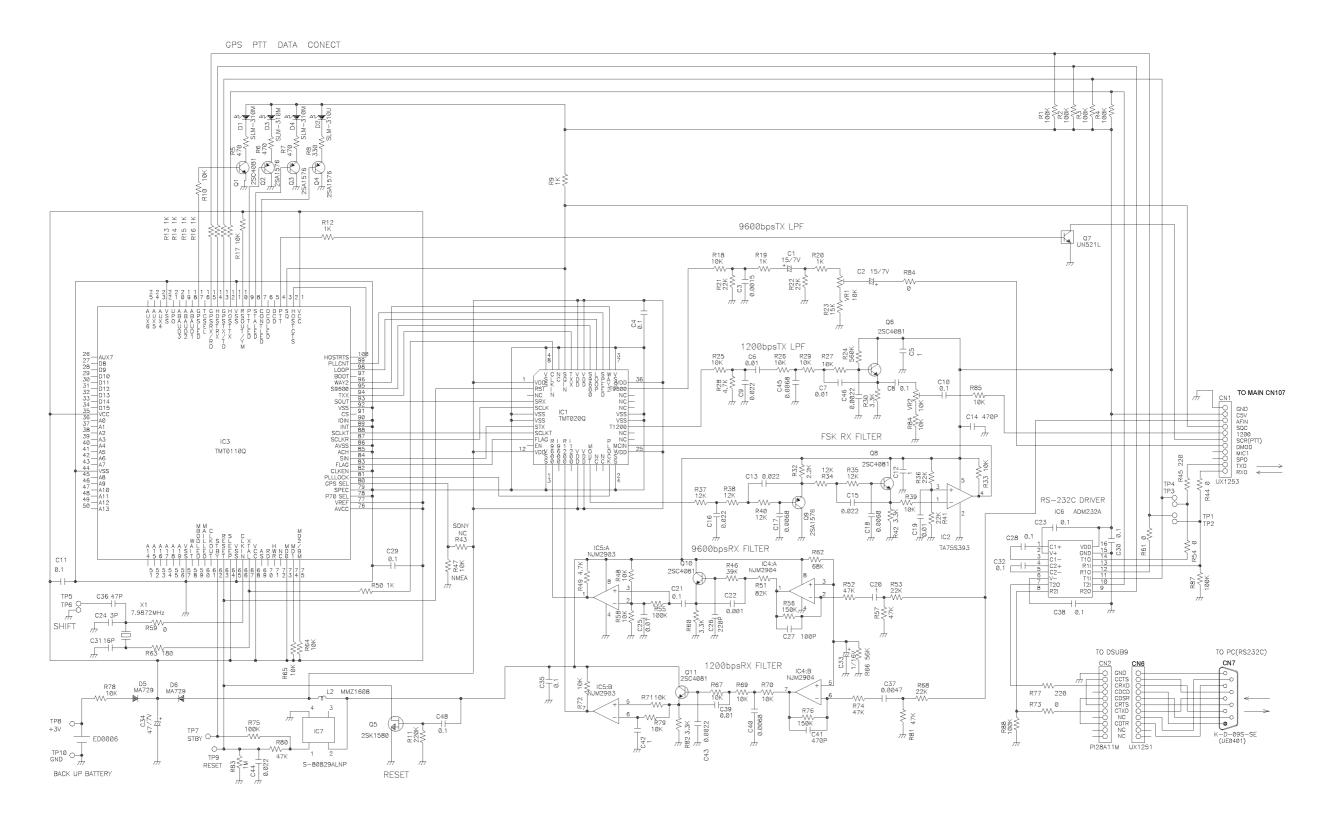
### 3) MAIN Unit DR-235

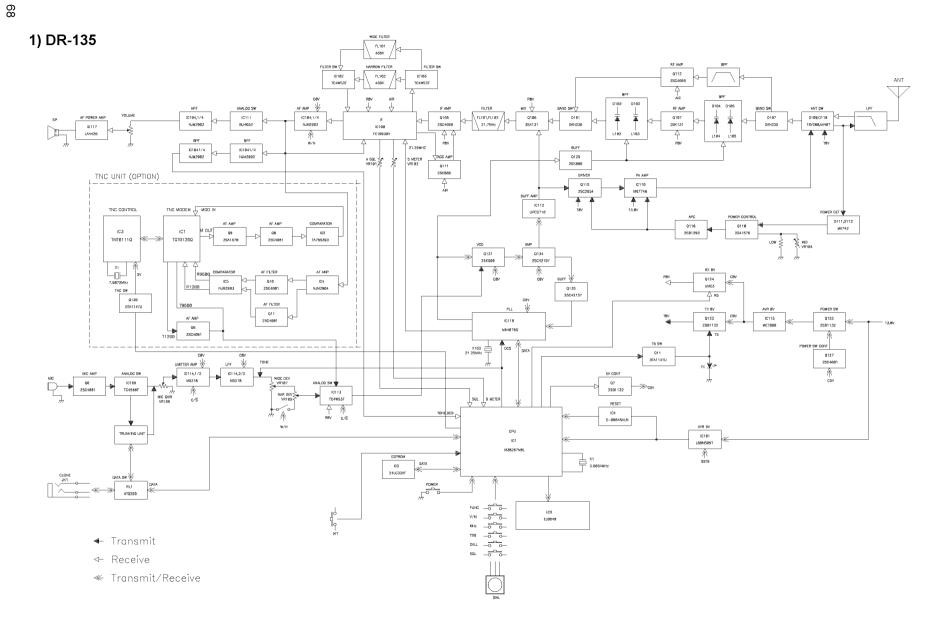


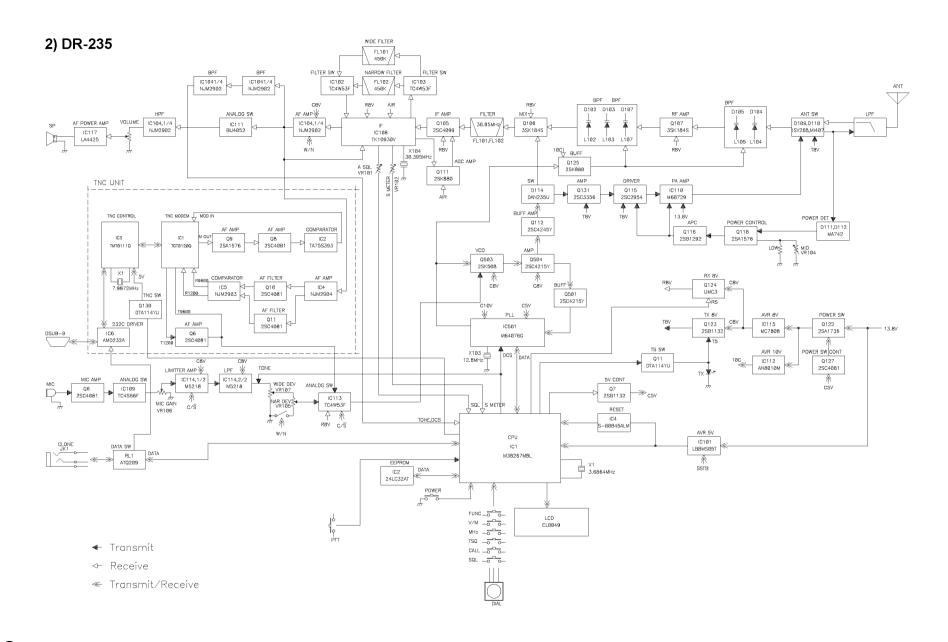
### 4) MAIN Unit DR-435

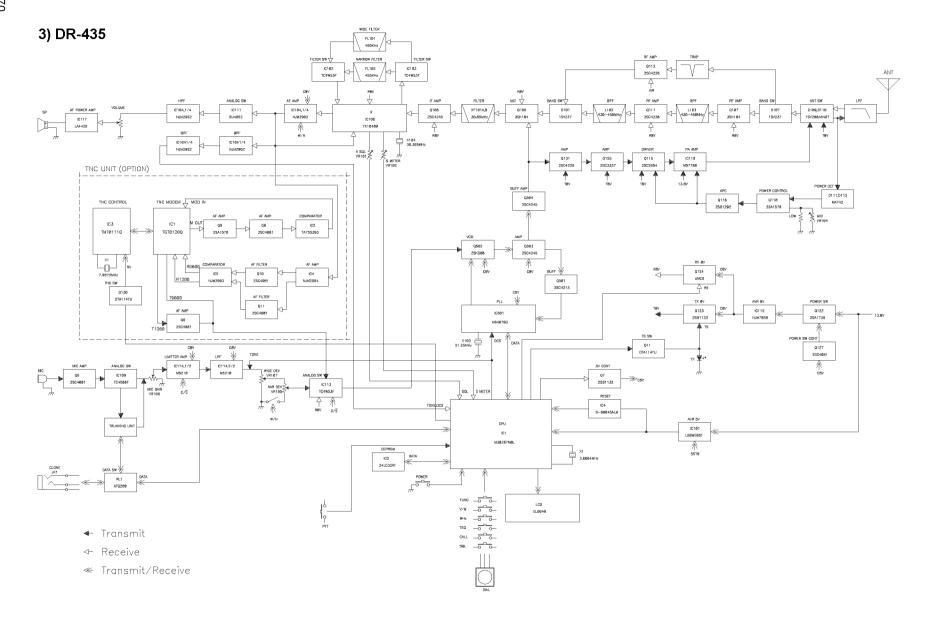


### 5) TNC Unit (DR-135TP only) or option









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